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ABSTRACT

The Education for All Handicapped Students Act (PL 94-142) mandates a referral process for learning disabled or educationally handicapped students. To see how a local agency implemented the federal law, and to describe institutional decision making in general, the day-to-day decision making activities of educators in a California elementary school as they made evaluative decisions about referring students to special education programs were studied. Detailed data were gathered by field observation, review of reports, interviewing, and videotaping key decision making events. The interaction of teachers with referred and nonreferred students was also compared. Results showed that there was considerable variability in the behavior of referred students but consistency in teachers' accounts of students' behavior. "Normal" and many different types of special students were described in similar terms. An examination of school psychologists' diagnostic practices found students' performance on psychological tests were collaboratively produced between testers and students. Analyses of district level placement committees showed that the full range of placement possibilities was not discussed. Results suggest that school districts are organized to implement standard practices rather than make systematic choices from a range of alternatives. The report includes a section on policy implications of the study, references, a summary of psychological and educational tests administered, and an explanation of the Wechsler Intelligence Scale for Children (Revised). (JAC)

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EDUCATIONAL DECISION MAKING IN STUDENTS' CAREERS

FINAL REPORT

NIE #G-78-0177 - UCSD #3433

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We wish to acknowledge the assistance that Norma Allison, Debbie Cosbey, Teresa Farrallo and Rob Komas gave to our project.

Summary of Research

The overall purpose of this research project has been to describe institutional decision making. The research provides a description of the actual-day-to-day decision making activities of educators in an elementary school district as they make evaluative decisions about the careers of students in schools, more specifically, as they decide to place students in one of many special education programs, or retain them in regular classrooms.

Data was gathered by field observation, review of official records, interviewing, and by videotaping key decision making events. This combination of techniques provides both a description of patterns of decisions made, and a description of the institutional practices that comprise these patterns.

The study was conducted in two phases. In the first phase, we described the distribution of students in the referral system, which lead us to discover the various constraints impinging on the decision making process. Decisions to provide special education services were constrained by fiscal, legal, and practical circumstances, such as the amount of money available for education, legal ceilings, and scheduling difficulties. The school district responded to these constraints in innovative ways: creative bookkeeping, formalizing informal procedures, and making placements for practical, not necesarily educational reasons.

The second phase of the study has been concerned with the institutionalized practices that constitute the distribution of students in various special education programs. We conducted more intensive analyses of key events at the referral, assessment, and placement phases of the referral process.

Since the referral process most often starts in the classroom we sought the basis of teachers' referral recommendations by comparing the interaction between teachers with referral and non-referral students in regular classroom events, and by examining teachers' accounts about the causes of students' success and failure.

There was considerable variability in the behavior of referral students. That is, all students in the same institutionally constructed category, (e.g., "learning disabled"), did not give evidence of similar classroom behavior, suggesting that the basis of teachers' referral is not the characteristics of students' behavior.

While there was not much consistency in the behavior of students, there was consistency in teachers' accounts about students' behavior. All teachers talked about the cause of students' difficulties in similar terms; they located the cause of difficulties within students, notably their ability and psychological states. Furthermore, teachers described "normal" and many different types of "special students in similar terms. This phase of the study counters personality theories that posit stable behavior patterns beneath trait terms.

When referral cases were forwarded to the assessment phase of the referral system, we examined psychologists' diagnostic practices. We found: (1) students' performance on psychological tests were collaboratively produced between testers and students, which argues against individualistic views of intelligence; (2) a "test until find" diagnostic procedure that continued until supposed disabilities were located. These diagnostic practices have the

(unintended) consequence of confirming teachers' original perceptions, and substituting institutionally refined designations ("learning disabled") for teachers' often vague descriptions ("needs help").

Final placements are made by a district level committee which includes parents. The full range of placement possibilities were not discussed in committee meetings; one or two options were presented to the committee for consideration. Placement outcomes were not so much decisions reached in the meetings as they were ratifications of actions taken at previous stages of the decision making process. Practical circumstances constrain decision making such that final placements are made in terms of available educational programs, available funds, teacher schedules, legal mandates, not just the student's "educational needs," or "disability." This practice of making placements by available category contrasts sharply with both "comprehensive" and "bounded" rationality theories of decision making, and the directives in special education guidelines.

One conclusion reached from this study is that large scale institutions, like school districts are organized to implement routines and standardized practices more so than they are to make systematic choices among a range of alternatives.

Another conclusion is that "educational handicaps" and "learning disabilities" are not characteristics inherent in students' actions. They are the consequence of institutional practices arranged for the identification, assessment and placement of students in educational programs. This means that displays of competence can be expected to vary from context to context.

We recommend that this "context specific" view of ability and disability be taken into account when formulating special education policy. We also recommend that serious consideration be given to adopting a "programmatic" rather than a "regulatory" view of policy implementation, and modifying the provisions of special education law that deal with the identification and placement of learning disabled and educationally handicapped students.

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SECTION 0. INTRODUCTION

The overall purpose of this research project has been to describe institutional decision making. The research provides a description of the actual-day-to-day decision making activities of educators in an elementary school district as they make evaluative decisions about the careers of students in schools, more specifically, as they decide to place students in one of many special education programs, or retain them in regular classrooms.

The study has been conducted in three phases. Phase I, which was the subject of the first End of Year Report (Mehan et al 1979) was concerned with data gathering. Phase II, which was the subject of the second End of Year Report, (Mehan et al 1980) was concerned with the distribution of students in the referral system and the various constraints on the decision making process. Phase III (this report) is concerned with the institutionalized practices that constitute the patterns of behavior reported in previous reports. Thus, this report is not a comprehensive review of all three years of our study. Instead, it is a summary of the activities of the third, and final year of our project. Readers interested in details about earlier phases of the study are encouraged to consult Mehan et al (1979) and (1980).

Like researchers on education from many disciplines who have gone before us, we are interested in the ways schooling makes a difference in the lives of students who attend them. Our original plans for investigating this issue were to study the educational decision making associated with the placement of students into a variety of educational programs. However, PL 94-142, "The Education for All Handicapped Students Act," was enacted at about the time the

study was to begin. The implementation of this law transformed the study from a general study of educational decision making to a specific study of the "referral process" mandated by this recently enacted federal law.

This coincidence (like so many other serendipitous events in social science research) turned out to be fortuitous. It provided us with a unique opportunity to see how a local agency implemented a recently enacted federal law (cf. Attewell and Gerstein, 1979). This law is particularly important, sociologically speaking, as it seems to have been informed by social science research on "labelling," especially the stigmatizing effects of mislabelling (Goffman, 1963; Mercer, 1974). The law is also important because it is so specific in its provisions. For example, it specifies the population to be served, the components and temporal parameters of the placement process in great detail.

The Setting

The study is situated in the "Coast District," located in a small West Coast town with a population of approximately 26,000-27,000. The population is approximately 70% white and 30% black and Mexican-American. This population has increased about 50% in the last ten years with the bulk of the growth occurring in the last five years with the building of several new housing developments. The community is located about 40 miles from a large Southern Californian metropolitan area, separated from the city by a number of other small coastal towns. Productive output is non-industrial; the majority of this town's income comes from tourism, local but restricted agricultural production, and a multutude of small entrepreneurial shops selling clothing, foods, books and surfing materials. The central area has several large

snopping centers, espcially in "New Town," while the older section remains primarily small snops.

The community as a whole is fairly affluent. The median income is $18,815 witn 63% receiving $15,000 and over a year. In 1970, this income range was skewed in the opposite direction: 58% made $10,000 or less annually. One explanation offered for this cnange is that families with higher incomes have been imported to New Town which is a higher cost area, and other financially solvent people nave also bought land in Old Town, principally along the cliffs overlooking tne ocean. Tne 'unused land' was bought from those who were unable to meet the nign (and increasing) tax demands of the area. Increasingly, local and "out of town" business speculators are buying in the area and establishing themselves. Recent proposals nave been approved for 're-development' of the main street in the old part of town. A "walk-in mall" is planned; tne re-development is financed by businesses, so no housing is included in the plan. It is expected to be completed by 1982.

About 12 years ago a major interstate highway was built and the town's businesses "went downnill," in the words of one resident, because tne majority of traffic was re-routed to giant snopping centers which received the business tnat was historically provided by local stores. The snopping centers could also afford to sell products cheaper than tne Old Town shops. Business in Old Town suffered. Recently, says a resident, attempts have been made to encourage increased travel on the old nighway. She says this has helped slightly, but "it will never be tne same again."

In the meantime, virtualy no building or changes have occurred in the old section of town. The recent "mall proposal" is the first attempt to deal with dying business in Old Town. Residential organization, on the other hand, has changed radically. Several new housing tracks have been built in the last 5 years accounting for the mush rooming population. Very similar patterns are occurring in surrounding communities. Ten years ago surrounding areas of 'unused land' supported farms raising beans, corn, tomatoes, avocadoes and flowers. They were considered 'chief exports' for a long period of time. Agricultural production has been reduced to tomatoes, avacadoes and flowers. Real Estate ventures and fashionable commodity shops are the new attractions.

The New Town residents are basically young, professional and upwardly mobile members of the middle and upper-middle class. They are predominantly doctors, lawyers, dentists, and executives. It is a very high rental district with a relatively high turnover among residents. Few residents consider it permanent but rather regard these highly priced housings as 'stepping stones' to bigger, and better homes. Old Town residents continue to be farmers on what natural land remains, small old establisned shopowners, flower growers and surfers. The personality of New Town is not unlike the personality of most of the concrete villages built overnight in Southern California in the last five years: it's contours are relatively non-descript, flattened versions of one-time hills and valleys where generalized lawns replace indigenous Chaparal, and concrete covers what has not been turned to green grass lawns. Water and its immanent shortage is a concern here since this area of the country is fundamentally desert. Only the importation of water through mammoth viaducts enables green lawns and swimming pools to survive.

The personality of Old Town says a resident, has not changed significantly despite contemporary business maneuvers. However, this may all change with the planned establishment of the "walk-in mall" scheduled to line the main street. Surfers, long time residents, flower growers and small farmers continue to reside in the older parts of town. But their number has been reduced and cloistered by the effect of the larger and newer shopping areas. There are a number of fashionable speciality shops in the old areas, which, one resident explains, "come and go" because of the high cost of competition with the larger shopping areas. Also the increasing tax base forces many small shop owners to sell out. Nonetheless, a number of restaurants ranging from 'greasy spoons' to health food spots persist. By far, said the same resident, surf shops have done and continue to do the best business. And, she added, this has been the case for the last 20 years. Put together, surfers, 'naturalists', farmers, "hippies," entrepreneurial businesses and religious groups co-exist fairly peacefully in Old Town.

A major political issue is the issue of growth, and of course, water. A coastal commission presumably organized and directed by residents with interests in preserving the coastal environment and organization of life in the area is a constant source of disagreement and "false promises." Large scale leveling of land for the purposes of condominium construction persists despite protests. From one resident's point of view the Coastal Commission claims to want to stop rapid unplanned growth, but have to date, fared poorly in this aim. This, she believes, is because members of the group are "bought off" by big developers and speculators solvent enough to buy their interests. In addition, developers willing to pay well over what "the market can bear" force the tax base up and then wait until the small owners fold.

Thirty years ago this community had one grade school, one Junior High and one High School. Each school had its own principal. At the time this study began, there were five elementary schools, three of which are direct results of the condominium/apartment construction of "New Town" in the last five years. A sixth school opened in two years ago--also a direct result of new construction. The elementary school system serves the entire district within which this town is situated. Enrollment in the district is 2700. The school system is governed by a school superintendent who is responsible to a local board of 5 elected members which in term reports to a county board and a State Board of Education.*

Public Law and Social Research

Under normal circumstances, students progress through school in a regular sequence. They enter school in the kindergarten, and at the end of each year are promoted to the next higher grade. Not all students follow this routine career path through school, however. Under unusual circumstances, students are removed from their regular classrooms during the school year, and are placed in a variety of "special education" programs.

These special career paths have been a long standing feature in U.S. public schools. Recently, federal legislation has formalized the procedures involved in placing students in special education programs. Public Law 94-142 was enacted to integrate handicapped individuals into the mainstream of American life. This act mandates a free and appropriate public education for all handicapped children between the ages of 3 and 21, and sets up a system of

*Margaret S. Crowdes contributed significantly to this section of the report.

federal financial support to states who implement the law. Funds are supplied to each school system for each child who is enrolled in a special education program, until the numbers of students reaches 12% of the school population, after which no funds are available.

The major purpose of PL 94-142, is "to assure that all handicapped children have available to them...a free appropriate public education which emphasizes special education and related services designed to meet their unique needs." [Sec. 601(c)]. What constitutes an appropriate education for a handicapped child is embedded in the six leading principles of the act: zero reject, nondiscriminatory evaluation, individualized education programs, least restrictive environment, due process, and parental participation. The principle of zero reject prescribes that all handicapped children be given a free, appropriate public education. The law defines it in this way:

> Special education and related services which (A) have been provided at public expense, under public supervision and direction, and without charge, (B) meet the standards of the State educational agency, (C) include an appropriate preschool, elementary, or secondary school education in the State involved, and (D) are provided in conformity with the individualized education program required under section 614(a)(5). [Sec. 602(18)]

The means for the zero reject principle are provided by a "child find" program on an annual basis to locate, identify, and evaluate all handicapped children who live in the public agency's domain.

Prior to any special education placement decision the law mandates a full individual evaluation of the referred child. Evaluation is defined as:

> procedures used . . . to determine whether a child is handicapped and the nature and extent of the special education and related services that the child needs. The term means procedures used selectively with an individual child and does not include basic tests

administered to or procedures used with all children in a school, grade, or class. (Federal Register, August 23, 1977, p. 42494)

The 1977 Federal Register stipulates that certain standards must be maintained to insure the nondiscriminatory evaluation of children with suspected disabilities:

(a) Tests and other evaluation materials:
(1) Are provided and administered in the child's native language or other mode of communication, unless it is clearly not feasible to do so;
(2) Have been validated for the specific purpose for which they are used; and
(3) Are administered by trained personnel in conformance with the instructions provided by their producer;
(b) Tests and other evaluation materials include those tailored to assess specific areas of educational need and not merely those which are designed to provide a single general intelligence quotient;
(c) Tests are selected and administered so as best to assure that when a test is administered to a child with impaired sensory, manual, or speaking skills, the test results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to measure, rather than reflecting the child's impaired sensory, manual, or speaking skills (except where those skills are the factors which the test purports to measure);
(d) No single procedure is used as the sole criterion for determining an appropriate educational program for a child; and
(e) The evaluation is made by a multidisciplinary team or group of persons, including at least one teacher or other specialist with knowledge in the area of suspected disability.
(f) The child is assessed in all areas related to the suspected disability, including, where appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities. (Federal Register, 1977, pp. 42496-97)

Information from a variety of sources including psychological and educational

tests, teacher and nurse advisements, and knowledge about the child's cultural or social background must be carefully documented when considering a special education placement.

Following the interpretation of evaluation data and identification of a handicapped child, the individualized education program (IEP) is developed by a multidisciplinary team in order to assure an appropriate education. All six of the leading principles of PL 94-142 are interdependent; however all must be considered in the process of developing and implementing the IEP. The IEP insures the legislative intent that all handicapped students' individual needs are met. For the purpose of revision, IEP's are reviewed at least once a year. The constituent features of each IEP are:

1. A documentation of the student's current level of educational performance.
2. Annual goals or the attainments expected by the end of the school year.
3. Short-term objectives, stated in instructional terms, which are the intermediate steps leading to the mastery of annual goals.
4. Documentation of the particular special education and related services which will be provided to the child.
5. An indication of the extent of time a child will participate in the regular education program.
6. Projected dates for initiating services and the anticipated duration of services.
7. Evaluation procedures and schedules for determining mastery of short-term objectives at least on an annual basis.

It is the public agency's responsibility to develop the IEP, even if an appropriate program is not available for the handicapped child residing in its jurisdiction. Further, a representative from the private (special or residential) school must participate at the evaluation and placement meeting where the IEP is written.

To the maximum extent conceivable the placement of children should be in the least restrictive environment, that is, handicapped children should be educated with nonhandicapped children. While the preference is clearly in the direction of less restrictive, precaution has to be taken when moving a student through the different levels of educational services to insure that handicapped children are not harmed by their emotional placements.

PL 94-142 sets forth specific protective safeguards pertaining to the rights and responsibilities of parents. Briefly, these rights and responsibilities involve the following:

1. If agreement cannot be reached about the appropriate placement or IEP for a handicapped child, then either parents or educators could initiate an impartial due process hearing. The principle behind due process is to insure the fairness of educational decisions affecting students' careers and the accountability of those persons making these decisions.
2. Parents must be provided access to all educational records and information pertaining to the school's evaluation of their child (including testing data).
3. Parental participation (direct and indirect) is secured by their involvement in the development and approval of education policy (e.g., permission to conduct assessments and attendance at evaluation and placement decision meetings).
4. Parents or guardians must receive written notice (in their native language) whenever the school agency proposes a change in the identification, assessment, or educational placement of their child.

The Referral System

In order to describe the decision making process involved as students are referred from "regular" elementary school classrooms, and are considered for placement in one of a number of "special" education programs, or are retained in the regular classroom, we followed the progress of students' cases through the special education referral system mandated by PL 94-142. A given case has

tne potential of progressing through a number of major decision making points. The key decision making points are "referral," "appraisal," "assessment," "re-appraisal," "evaluation" and "placement." These decision making points are identified by r in Figure 0.1. Referral cases progress at varying rates, and are resolved at different points in the system (e.g., after appraisal, after assessment, in the placement committee). The following description is intended to describe the activities associated with each of these key decision making points, and to describe the variety of students' educational careers that result as their cases travel different paths through this referral system.

The referral system in this school district is activated by a recommendation from a teacher, principal, or parents. Students are referred for a host of reasons, including unusual academic performance, discipline for misconduct, physical handicaps, or behavioral problems.

--insert Figure 0.1 here--

The case is supposed to be forwarded to a "School Appraisal Team" (SAT) by the school principal. However, the case may never get any further than the office log book for a variety of reasons: e.g., the family moves out of the district. Or the case may be forwarded to the committee but not considered due to a backlog of work. The consequences of any of these circumstances is that the student stays in the regular education classroom. This is career path #1 "SAT never considers case" on Figure 0.1.

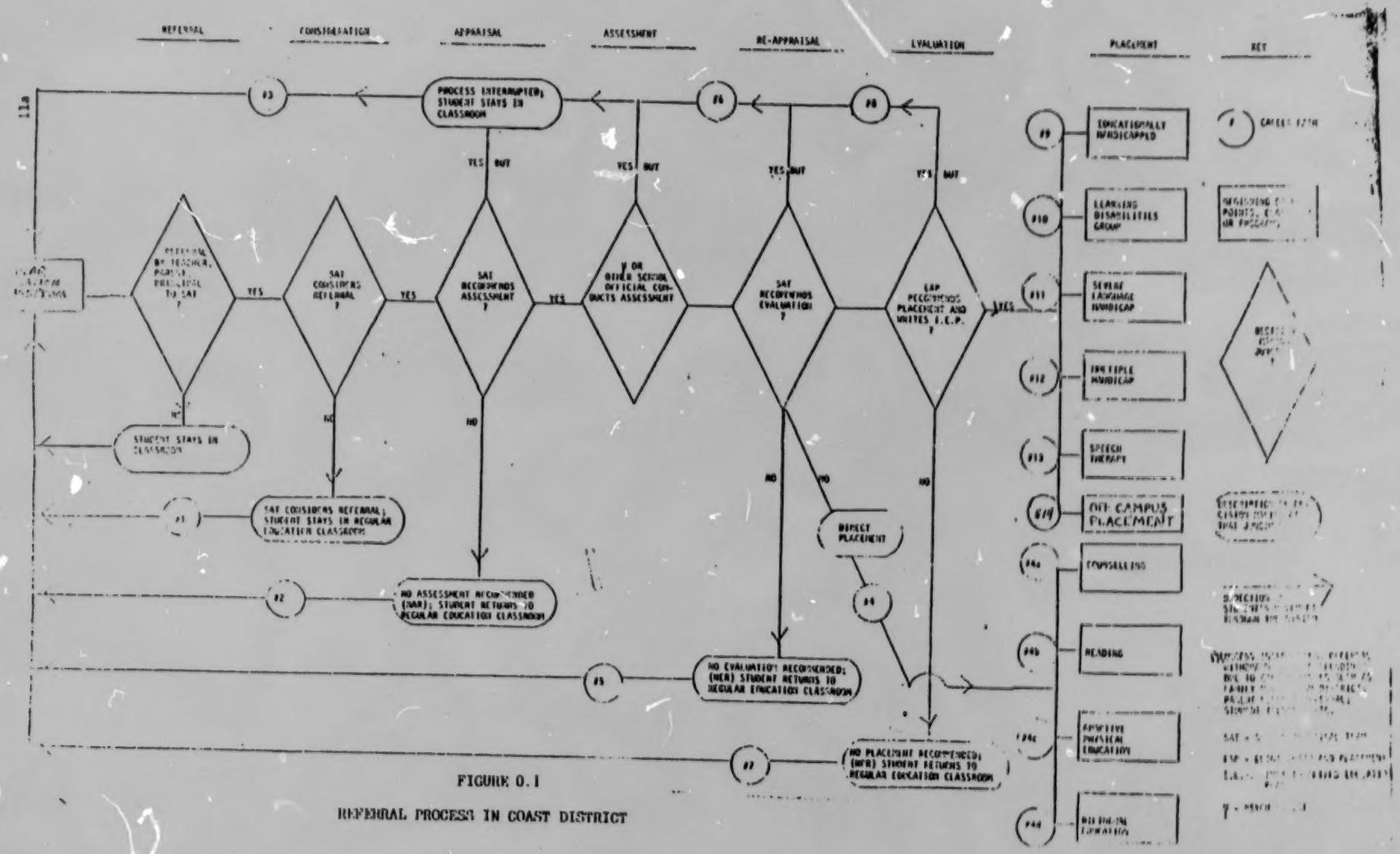

FIGURE 0.1

REFERRAL PROCESS IN COAST DISTRICT

Most cases are considered by the School Appraisal Team, however. The SAT is a school-based committee composed of the school principal, the teacher of the referred student, a special education teacher, and a psychologist from the district office. The person making the referral, most often the classroom teacher, presents the case to the SAT. The purpose of the SAT committee is to appraise the merits of the case. After hearing the evidence, the committee could exercise a number of options. It could conclude that the referral was not warranted. By taking no furtner action the case is closed, which retains the referred student in the regular education classroom. This "no assessment recommended " (NAR) option is career path #2 on Figure 0.1. The SAT could also conclude that the referral was warranted. In such cases, the committee recommends assessment by the school psychologist (and/or the special education teacher or other professional in the case of speech, hearing, or other physical problem). This action keeps the case open, and in the system.

According to the law, a parent or guardian of the referral child is supposed to be notified once a decision to give an intelligence test is reached, or a psychologist works with the child on a one to one basis.[1] The referral process was often interrupted at this time, when, for example, parents refused to give permission for psychological or educational testing, disagreed with the decision to refer, or when records from another educational institution were not obtained. When the referral process is interrupted, students stay in the regular classroom, as indicated by career path #3 on Figure 0.1.

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1. At this point in the referral process, students are identified and talked about as "referral students." As we will discuss in a later point (section 2), such early labelling of students has consequences for students' careers.

"Assessment" involved psychological and educational tests, home and classroom visits, and consultations with parents and teachers. The results of those examinations and consultations were returned to the SAT for further discussion. The SAT exercised two major options at this "re-appraisal" point in the referral system. It could refer the case to a district wide committee, or it could take no further action. This second option retains the child in the regular classroom. It is identified as "no evaluation recommended" (NER) (Career path #5 on Figure 0.1). A variation on this option involved "direct placement." Under certain circumstances, the SAT placed students into particular special educational programs without going through the normal evaluation phase of the program (to be described below). This "direct placement" career path is identified as #4 in the system. Once again, the referral process can be interrupted at this point, and students would be retained in their classrooms (see career path #6 on Figure 0.1).

Final "placement" decisions were made by the "Eligibility and Placement" (E&P) committee, a district wide, multi-disciplinary team, composed of the student's parents, the school administrator in charge of special education, the school nurse, the district psychologist who was "carrying the case," the classroom teacher who made the referral, and a special education teacher who would potentially receive the referral student. The E&P committee had two main options at this point: recommend placement or not recommend placement. The "no placement recommended" (NPR) decision retains the student in the regular classroom (see career path #7 on Figure 0.1). If the committee recommends a special education placement, it has a number of placement possibilities available, as shown in the "placement" column on Figure 0.1.

A Portrait of the Study

The overall purpose of this project has been to follow the progress of students' careers through this decision making system.

Data gathering. Materials for this study were gathered by reviewing official school records, from field observations of daily educational practice, by videotaping key decision making events, and from interviews of a number of school personnel. The records of all 2700 students in the district were reviewed. These records provided us with such base line information as the age, grade, sex, and other demographic information, as well as the official referral reason, date of referral, the person making the referral, psychological assessment information, educational test results, dates of test administration, and final disposition of all referrals in the district.

Information available from school records was checked against information that became available to us by observation in classrooms, informal discussions with principals and personnel at the district level, and more formal interviews conducted at the university. Information gathered from this combination of documentary analysis, interviewing and observation is providing us with a varied and systematic basis for analyzing the decision making process concerning student careers.

Research methodology and its theoretical underpinnings. Contributing to the continuing dialogue among researchers in the ethnographic tradition (broadly conceived), our study has been guided by research techniques developed in "micro" or "constitutive" ethnography. The scope and definition of ethnography has varied considerably, and opinions and practice differ on

many details (see for example, Sanday, 1979; Erickson and Shultz, 1980; Hymes, 1980a, 1980b; Brice-Heath, 1981). These variations spurred serious re-thinking of the many aspects of ethnographic research, and has led us (as it has led others), to go beyond an uncritical narrative of cultural detail, and focus on a deeper analysis of our recorded observations, and developing the very theses (as well as new ones) that guided our research. Research, after all, is re-search, a statement about the reflections of our searches.

We are pressing for an ethnographically informed theory concerned with the wider educational and socio-political context of the classroom and the school. Microethnography has been associated with the fine-grained analysis of the minute details of face-to-face interaction in a small number of educational events. This association developed, in part, we are sure, because as microethnographers were developing their theories, refining their research techniques, and acclimating educators, students, and parents to the use of audio-visual equipment, they concentrated on a small number of events. For the most part, the social organization of an event within one educational setting was described separately from events within other educational settings within the school, or without comparing events inside and outside of school.

Microethnography is not just a research technique, it is informed by a theory (Erickson and Shultz, 1980; Mehan, 1978, 1979; McDermott et al, 1978). The theory is concerned about the ways in which the enduring and stable features of our everyday lives are assembled in social interaction. One place that these interactional processes can be located in the educational realm is in face-to-face encounters between people, for example, teachers and students. But that is not the only place. Social structures are also assembled when

educators work autonomously, filling out forms, writing reports, or when a group of educators in the form of a committee work on a textual or documentary representation of previous face-to-face encounters (Cicourel, 1975). An underlying theme of this project is to demonstrate that the interactional or mutually constitutive theory informing microethnography has application across situations and in broader contexts.

In order to describe how we are linking the structuring of interaction that unfolds in face-to-face and person-to-text encounters with the broader educational and socio-political context, it may be helpful to borrow a popular metaphor. We started with a wide angle lens and 'zoomed' in on micro-contexts (e.g., classrooms, testing sessions, committee meetings), and progressively focused on the setting in order to capture the features considered most salient. Then, to avoid editing out the larger socio-political and educational issues, we 'zoomed' back out into the larger context, carrying with us those new insights we had gained into the micro-contextual features.

In its rush to the classroom, research has sometimes been guilty of premature closure and 'tunnel vision.' The advanced recording devices used by ethnographic researchers are not researching for their own sake, but rather, are heuristic and exploratory. We can't claim to account equally for every aspect of school life (both internal and external) in our analysis. However, while following referrals we do acknowledge a conscious attempt not to manipulate, control, or eliminate (and thereby miss out on) aspects of this complex totality and to instead systematize to give more concentrated attention to the emerging issues.

Some Preliminary Observations

A total number of 141 "first time" referrals were processed through the referral system during the 1978-1979 school year. [2] The classroom teacher was listed in the school records as the person making all of these referrals. We must not confuse the official referral agent of record and the people involved in the decision to refer. We simply cannot determine the number of times parents and teachers or principals and teachers conferred before the teacher filled out the official referral forms.

The average enrollment of this district during the time of our study was 2781. This means that 5.0% of the students in this district were referred during the school year in which data was gathered.

The various "career paths" through the referral system were described above, and are depicted in Figure 0.1 above. Table.1 summarizes the number of students, or rather, students' cases that traversed these paths.

--insert Table 0.1 here--

The most well travelled path is from the classroom through referral, appraisal, assessment and placement into a "learning disabilities" program. A total of 36 students (25.7% of referred students) were placed in this program. The "LD" Group, as it is sometimes called, is a pullout program, i.e., students spend part of their school day in their home classroom, and another part

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2. One of these cases lacked sufficient information to process. For the most part we will consider 140 cases in our analysis. Sixteen additional cases were considered during this year. These additional cases were referrals from special education teachers, suggesting that students were ready for "mainstreaming" or a modification in their individualized assessment plan. The "replacement" of students in regular classrooms is beyond the scope of this study, and these cases will not be considered in the following discussions.

TABLE 0.I

CAREER PATHS THROUGH THE REFERRAL SYSTEM

Career Path #		No.	%
1.	Child referred, case never considered by SAT; child remains in classroom	1	0.7
2.	SAT considers case, no assessment recommended; child remains in classroom	19	13.6
3.	Process interrupted at appraisal phase; child remains in classroom	24	17.1
4.	SAT considers case at re-appraisal phase, makes direct placement (Adaptive P.E. =1; Bilingual =3; Reading =1; Counseling =6)	11	7.9
5.	SAT considers case, recommends assessment; assessment conducted, no evaluation recommended, child remains in classroom	28	20.0
6.	Process interrupted at assessment or re-appraisal phase; child remains in classroom	4	2.8
7.	E. & P. considers case, no placement recommended, child remains in classroom	1	0.7
8.	Process interrupted at evaluation phase; child remains in classroom	1	0.7
9.	E. & P. considers case; recommends placement in Educationally Handicapped Classroom	7	5.0
10.	E. & P. considers case; recommends placement in Learning Disabilities Group	36	25.7
11.	E. & P. considers case; recommends placement in Severe Language Handicapped Classroom	3	2.1
12.	E. & P. considers case; recommends placement in Multiple Handicapped Classroom	2	1.4
13.	E. & P. considers case; recommends placement in Speech Therapy	3	2.1
14.	E. & P. considers case; recommends placement in off campus facility	0	0
	TOTAL	140	99.8%

of their day in a special education program.

The next most represented educational decision is career path #5, "no evaluation recommended." A student achieves this educational designation when his or her referral is considered by the School Appraisal Team, educational assessment is recommended and conducted, but upon re-appraisal of the case, not enough reason is found to warrant its further consideration. Instead, the student is retained in the regular classroom. A total of 28 cases (20%) travelled this career path through the system.

A formal decision was not reached on a significant number of cases because the referral process was interrupted for a variety of reasons. A total of 29 cases (see career paths #3, #6, and #8) (20%) fell into this category, all of which have the consequence of leaving the student in the regular classroom by default, as it were.

The final points on the career paths are similar in their consequences for students' lives. There are two main decision outcomes generated by the system: retain in a regular educational program, or place in a special education program. A student can achieve the status of a regular education student by design or by default. That is, a formal decision to retain a student in a regular classroom can be reached, or the system is interrupted in such a way that the student remains in his classroom because the case is not closed. Special education programs can be grouped into "whole day" also called "self-contained" classrooms, and "pullout" programs. The programs in the first group are considered the more extreme placements, while the programs in the second group are considered less extreme. The least severe placement of all is "counseling." In such cases, parents are encouraged to seek advice from a

professional psychologist outside the district.

The "career patns" in Table 0.1 are collapsed into these Regular and Special Education Placement categories in Table 0.2.

--insert Table 0.2 here--

This table shows that 56% of the cases referred were resolved, either by design or by default, as regular education placements. The remaining 44% of the students were placed into one of three types of special education programs. It is interesting to note that 62% (49 of 78) of the cases in the regular education category were not "placements" at all, but came as the result of interruptions in the referral system. The great majority (63%) of special education cases were placed into the less severe, "pullout" programs, while 27% of special education placements were placed into self-contained classrooms.

These are the basic facts about the products of the referral process in the Coast District during the 1978-1979 School Year. We now turn our attention to the referral process itself.

We will describe some of the institutional practices that are responsible for the distribution of students into these educational categories. To this end, we have conducted a more micro, constitutive analysis of a small number of events at the referral, assessment, and placement phases of the referral system during this, the third and final year of this project. For each of the three key phases in the referral, assessment, and placement phases of the referral system, we have a behavioral record of the interaction that took place between the participants, and documents that were produced in such

TABLE 0.2

TYPES OF PLACEMENTS

Regular Education	Total	%
Remains in classroom be decision	49	
Remains in classroom due to interruption in process	29	
Total Regular Ed	78	55.71
Special Education		
Counselling	6	
"Pullout" programs[1]	41	
"Self-contained" programs[2]	15	
Total Special Ed	62	44.28
Total Referral Cases	140	100%

1. Pullout special education programs are: LDG, Speech Therapy, Reading, Adaptive Physical Education.

2. Self-contained programs are: EH, SLH, MH and Bilingual Programs.

encounters (e. g., referral forms from teacher-student interaction, psychological assessments from tester-student interaction, IEPs from E&P Committee meetings). We also have accounts of what happened during these events from at least one of the participants in the event. This set of materials facilitates a number of analyses, both within and between events (See Figure 0.2, below).

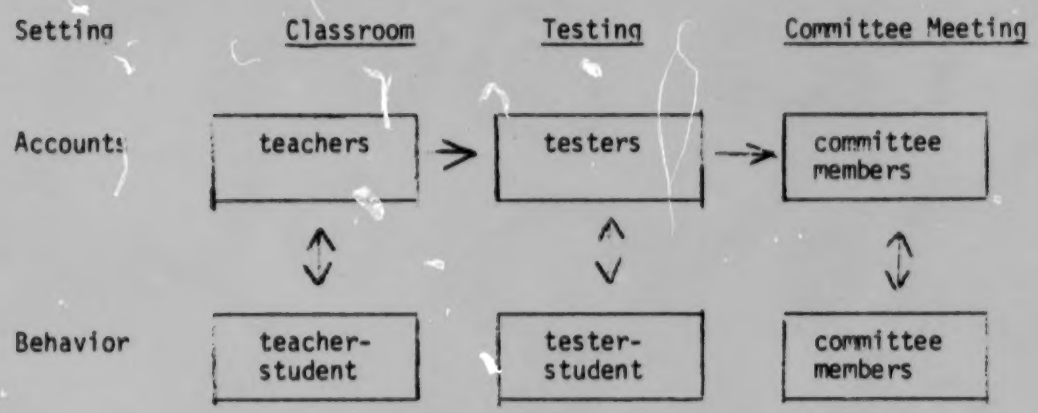
--insert Figure 0.2 here--

Within a given event, the interaction between participants is available for analysis. In addition, as a student, or rather, a student's case or file proceeds through the referral system, we have been able to compare the performance record between events. That is, we have been able to determine how a referral student's behavior compares with his/her behavior in the testing situation. We take up this topic in Section 2.0, below. The interaction that takes place in classrooms between teachers and students (both referral and non-referral), the interaction between psychologists and students that takes place in testing situations, and the interaction among committee members is discussed in Sections 1, 2, and 3, respectively.

The same points of comparison are available from our viewing sessions. Not only are the structure of accounts generated about a particular phase of the referral process available for analysis, but differences in accounts generated by the same person on different occasions (e. g., the classroom teacher while watching videotape of classroom interaction, and the classroom teacher while watching videotape of the committee meeting) are subject to analysis.

FIGURE 0.2

ACCOUNTS AND BEHAVIOR AT KEY DECISION MAKING JUNCTURES



SECTION 1. THE CLASSROOM BASIS OF STUDENTS' ACADEMIC DIFFICULTIES

In this section of the final report, we explore the classroom performance of students who have been referred for special education and students who have not been referred. The purpose of the analysis is to determine whether there is a common pattern in the interaction between teachers and referral and non-referral students within a given classroom, and whether there are common patterns across classrooms. We engage in this analysis in order to determine the basis of students' academic difficulties. Our index of academic difficulties is "referred for special education." Students who have been identified by classroom teachers as candidates for special education are considered by teacners, and hence by us, as having difficulties in school.

Theories of Students' Difficulties in School

This analysis of the basis of students' referrals is grounded in competing theories about students' academic success and failure. Three competing theories can be identified: a "realist," a "mentalist," and a "constructivist."[3]

The differences between these three theories concern the source of the student's success or failure. Proponents of a realist perspective on students' academic academic performance concentrate on the characteristics of students' behavior. Mentalists locate the reasons for students' success or failure in the mind of the person perceiving the student e. g., the clasroom teacher or school psychologist. Constructivists say that students' success or failure emerges from the interaction between the perceiver (e. g., classroom

3. For a more complete description of the philosophical underpinnings of these three theories, see Mehan (1981c) and Mehan et al (1981).

teacher) and the object of perception (the student). The ontological question of the location of the structures of perception becomes: is "good/bad" performance "in the student" (a state or a trait), "in the head" of the teacher, (an expectation), or does the category ("good student," or "special education student") emerge from the interaction between the student and the teacher?

Realist Accounts of Students' School Performance

Realist explanations of differences in students' school performance cluster around the concept of "students' characteristics." Students who succeed and those who do not are said to have different traits, be they linguistic styles (Bernstein 1971, 1973), or cognitive styles (Ramirez and Castaneda, 1974), differences in backgrounds or environments (Jencks et al, 1972; Coleman et al, 1966), or differences in hereditary states (Jensen, 1969; Herrnstein, 1971). These "states and traits" theories are similar in that they locate the cause of school achievement in and around the students themselves.

States and traits assumptions are also found in the "medical model" inherent in PL 94-142, the federal law that governs the education of all handicapped students (Mercer, 1979). The medical model is a conceptual tool used in medical research to understand and combat pathological conditions in the organism; it assumes that symptoms are caused by some biological condition in the organism, and that sociocultural characteristics of the individual are irrelevant in making a diagnosis:

> In the medical model, the organism is the focus of assessment and pathology is perceived as a condition in the person, an attribute of the organism. Thus, we say a person <u>is</u> tubucular, or <u>has</u> scarlet fever. (Mercer, 1979:95)

While the Education for All Handicapped Children law has specific provisions for answering questions about the physical state of students, e.g., measures of "health, vision, hearing... and motor activities" (Federal Register 121a532 (3) F), the underlying assumptions of the medical model extend beyond the physical aspects of students considered for special education. Attributes such as "intelligence," "aptitude," "potential," or "mental ability" are also considered to be internal states or the private possessions of the student.

An example of a realist account of students' school performance is that of Bereiter and Englemann (1966) who focus upon differences in students' "cognitive styles." They conclude that the language of ethnic minority and lower class preschool children is "inadequate for expressing personal or original opinions, for analysis and careful reasoning, for dealing with anything hypothetical or beyond the present or for explaining anything very complex" (1966:32). They argue that linguistic deficiency is the basis of the poor school performance of "disadvantaged children" and forms the basis of such increasingly popular instructional packages as DISTAR which teach poor and ethnic minority children by drill and practice, rote learning, and by dispensing tangible positive reinforcements.

Similarly, differences in cognitive styles are said to account for the poor performance of Mexican-American children in comparison with Anglo children:

> Research has shown that Mexican American and Anglo-American children perform differently on cognitive tasks as well as on tasks reflecting incentive-motivational and human-relational styles. These findings can be explained by the conceptual framework of field sensitivity/field independence. It was hypothesized that differences in cultural values are reflected in socialization practices,

> which in turn result in differences in cognitive style between Mexican American and Anglo-American children. That is, Mexican American children are relatively more field sensitive and Anglo-American children more field independent in cognitive style. (Ramirez and Castaneda, 1974:79)

Mentalist Accounts of Students' School Performance

A second set of explanations of differences in students' school performance shifts the reason from the characteristics of the student to the head of the teacher. The most notable example of mentalist accounts of school performance is "expectancy theory" (Rosenthal and Jacobsen, 1968; Bar Tal, 1978). In its most extreme and simplistic form, expectancy theory assumes that it is not the students' characteristics or behavior that leads to success or failure; it is the expectations that teachers have for students' behavior that is considered paramount (Rist, 1977).

Expectancy theory bears a strong family resemblance to labelling theory (Griffin and Mehan, 1980), especially as that theory has been applied to the identification of mentally retarded students (Mercer, 1974) and the study of rule breaking in classrooms (Hargreaves et al, 1975). Instead of searching for the source of deviance in the biological make-up of the actor (Sheldon, 1949), the early socialization of the child (Cohen, 1955; Sutherland and Cressy, 1966), or in the breakdown of the social structure (Merton, 1949), labelling theorists (Lemert, 1951; Kitsuse, 1962; Becker, 1963) looked to societal reactions to actions in the generation of deviance. According to labelling theorists, the main difference between normals and deviants is that deviants have been apprehended and processed by formal institutions (e.g., courts and hospitals), while so-called normals have not, in spite of having committed similar acts in many cases.

Thus, from the point of view of labelling theory, and its cousin expectancy theory, the reasons for students' success or failure are not to be found in the acts or characteristics of students; rather, they are to be found in the teacher's reactions to student behavior. Successful students and unsuccessful students are such not because of the inherent characteristics of their actions, but because they have been labelled or defined by others as successful or unsuccessful.

Constructivist Accounts of Students' School Performance

A third set of explanations of differences in students' school performance focus upon the interaction between student behavior and teacher treatment of student behavior. According to these accounts, "objective social facts" such as students' intelligence and scholastic achievement are accomplished in the interaction between teachers and students, testers and students, principals and teachers, counselors and students (Erickson, 1975; Erickson and Shultz, 1980; McDermott et al, 1978, Mehan, 1978, 1979).

Research conducted on the social organization of the classroom (Philips, 1972, 1976; Bremme and Erickson, 1977; Erickson and Shultz, 1977; Florio, 1978; McDermott et al, 1978; Gumperz and Herasimchuk, 1975; Menan, 1979; Shuy and Griffin, 1978; Shultz et al, 1979) points to the notion that competant membership in the classroom community involves the integration of social behavior and social context. Learning that certain ways of talking and acting are appropriate on some occasions and not others, learning when, where, and with whom certain kinds of behavior can occur, are part of the social knowledge that is considered essential to a student's effective school perfor-

mance.

From the point of view of a constructivist theory, success or failure is not a function exclusively or primarily of students' characteristics or teachers' expectations. Rather than an individual perceiving an object in isolation, the constructivist image is one of individuals acting together in organized contexts to create and maintain the link between categories such as "special education student," and behavior.

This image reflects the underlying premise of constructivist theory: the objects of the world are social accomplishments. That is, when perceiver and object come together, what is perceived is a function of the interaction of culturally provided categories that the perceiver brings to the interaction and new information about the object that occurs in the interaction. In this perspective, there is an emphasis on the process by which categories such as "normal" or "special" student are created in interaction. Constructivist theorists argue that it is in the moment-to-moment give and take of classroom interaction that teachers' expectations are built up and worked out.

A History of the Research

Methods

The materials for this examination of students' behavior and teachers' treatment of students' behavior come from three sources: teachers' referral reasons on official forms, videotaped segments of classroom interaction, and "viewing sessions" in which the teacher was interviewed about the events recorded on the videotape. The videotaped classroom segment provided data about student-teacher interaction, and the official referral reasons and

teachers' comments during viewing sessions provided data about teachers' interpretations of the interaction.

In order to locate students who had been referred for special education, we contacted classroom teachers after they made referrals; 27 teachers who had referred 55 students agreed to participate in this phase of the study. Out of the 55 cases, we selected 17 for in-depth case study analysis. [4]

Before videotaping, a member of the research team observed in the classroom to obtain a sense of classroom routine and typical patterns of classroom life. Based on these observations, representative classroom events which included the referral student were videotaped. The tapes were viewed for preliminary comparisons of the behavior of referral and non-referral students and then "viewing sessions" (Shumsky, 1972; Cicourel et al, 1974; Erickson and Shultz, 1980; Florio, 1978; Davies, 1978; Shuy and Griffin, 1978; Anderson-Levitt, 1981) were scheduled. While viewing the videotaped classroom event, the teachers were asked to recount the reasons they referred the student(s) and to comment upon the students' behavior on the videotape.

Construction of Case Studies

For each of the 17 cases, we reviewed the videotapes, transcripts of the videotapes and of the viewing sessions, and the field notes using a set of orienting questions about differential student behavior and differential teacher treatment. We asked:

1. Do students complete the nominal task of the lesson? Are there differences in the academic performance of referral and non-referral students?

4. See Menan et al (1979) for the procedures used to select those 17 cases.

2. Do students know how to get the floor? When to talk? How to talk?

3. Once they gain access to the floor, does their contribution join in the flow along academic and interractional dimensions?

We obtained a more detailed description of individual student contributions to the lesson through both a quantitative and a more complex sequential analysis of the transcript of the classroom interaction. The quantitative analysis consisted of compiling a simple distribution of initiation turns and conversational acts. The sequential analysis required more of an ethnographic approach to the overall sense of the event and a description of larger segments of the transcript. Here we focused upon the quality of students' initiations and responses to questions.

The transcript of the viewing sessions with the teacher provided both a guide for our interpretation of the classroom segment and new information about the teacher's interpretation of the same events. In particular, we obtained information about whether teachers were orienting to students' behavior differently, especially that of the referral students.

Case Study Synthesis

After preparing case studies of student behavior and teacher treatment for each classroom, we examined the similarities and differences of cases across classrooms in order to determine whether a uniform statement could be made. The wide variation we found across cases appeared at first to defy generalizations. At the same time, we attempted to organize the data in a way that would satisfy the goals of "large scale" cross-site comparisons, without

sacrificing the variation and richness within each case.

We selected differential student behavior as the organizing principle for the data because it is the underlying assumption of the referral process itself. The present conception of "special students" is that they have a handicap, and that their behavior is therefore observably different than that of other students. We distributed the seventeen cases along a continuum according to the degree to which the referral student's behavior was observed to differ from that of the non-referral students participating in the same event (See Figure 1.1).

We defined the behavior of the non-referral students as the classroom "norm." The degree to which the referral students' behavior differed from this norm for the seventeen cases fell along the continuum into roughly four clusters or categories that we designated "overt," "moderate," "subtle," and "covert" norm deviation. The norm violations of both referral and non-referral students were also marked by the teacher's reactions such as negative sanctions and directives during the classroom event and by his or her comments in the viewing session.

In order to present both the range and depth of the data, we chose one case from each category as an examplar to discuss in detail. This approach attempts to fulfill two interrelated goals: to integrate "micro" level analysis with "macro" level cross-site comparisons in order to describe the relationship between student-teacher interaction and educational "facts" such as "special education students," and more broadly, the relationship between social processes and social products.

Figure 1.1

DISTRIBUTION OF REFERRAL CASES

OVERT	MODERATE	SUBTLE	COVERT
Dillon (never SAT)	Hale (test/ret.)	Kitty (test/ret.)	Chris (LDG)
	Tracy (LDG)	Travis (NAR)	Shane (LDG)
	Richard (Speech)	Teresa (NAR)	Robard (LDG)
	Preston (LDG)		Mindy (Reading)
	Bart (NAR)		
	Luis (Bilingual)		
	Roger (LDG)		
	Zane (LDG)		

Summary

Our analysis of classroom interaction provides materials for testing the adequacy of tne three theories about stuents' school performance discussed earlier in this section. Specifically, we want to know whether a student's placement into special education is a function of a state or trait "in the student," an expectation "in tne teacher's mind," or an interaction of student benavior and teachers' categories.

Case Study Analysis

Overt Norm Violator

Dillon is a referral student who exemplifies an "overt norm violator." His behavior was observably different from other referral and non-referral students in the lesson in which he participated, and from all other referral students in our sample. Throughout the videotaped classroom segment, Dillon rarely paid attention and by the second half of the lesson, he was jumping around the room laugning and repeating nonsense utterances such as "turkey, turkey." Otner students, who had also been referred for otner reasons, committed similar norm violations. Yet, the teacher treated them differently. Altnough Dillon's norm violations were more severe and numerous, the teacher treated them more tolerantly than she did those committed by others. more tolerantly as Dillon's teacher does.

Referral information from school records. Dillon is an English speaking Caucasian second grader referred by his teacher on September 20, 1978 for the following reasons:

1. daydreaming
2. does not finish assignments
3. short attention span
4. does not respond to rewards for completion of work
5. not much peer interaction
6. no math skills

The SAT met several times on Dillon's case: first on September 20, 1978 when it decided to observe Dillon; second on October 18, 1978 when it decided to continue observation; and third on February 14, 1979 when continuation of observation was again decided. By the end of the school year, Dillon's case had not received full treatment by the SAT. He was kept in a "holding pattern" because school officials, particularly the teacher, hoped he would improve over the year.

Student performance in vocabulary lesson. Our observations of Dillon come from a videotaped vocabulary lesson in which the teacher used flash cards to elicit word recognition responses from students. In addition to Dillon and the teacher, Zane and Mindy, two other referral students, and Charlotte, a student who had almost been referred, participate in the lesson. However, the representativeness of this classroom event is problematic. In the interview, the teacher stated that this group of students was assembled specifically for the purpose of videotaping; normally the teacher would work individually with Dillon and Zane on reading. Yet, when viewing the videotaped lesson later, the teacher said that the behavior students exhibited on the tape was representative, and that these students were chosen for the group because they all perform roughly at the same level in reading.

The lesson consists of three tasks:

1. naming all the vowels
2. naming the words on flash cards as a group
3. naming the words on flash cards in a contest

Charlotte named two vowels, Mindy and Zane one each. All of Dillon's utterances during this task are nonsensical (e.g., "by, by, by, by" and "upside down, upside down").

In the second task, Charlotte was by far the most proficient at recognizing words naming 17 correctly. Mindy and Dillon name two correctly and Zane names one. Charlotte is also the only student to answer any of the teacher's process and therefore more difficult questions (5 out of 5).

Charlotte names 14 words correctly in the contest phase of the lesson, Zane names 6, Mindy names 4, and Dillon does not name any. Overall, Charlotte performs far better than the others (31 correct responses). Mindy and Zane (6 or 7) perform equally well and Dillon performs least well (2 correct).

Student and teacher contributions. The teacher talks 49% of the time and students talk 51% of the time during this lesson. She addresses 26% of her initiations to Dillon, 28% to Zane, 9% to Charlotte, and 4% to Mindy. The rest (33%) are directed to the group as a whole. Fifty-eight percent of the teacher's initiations are directed to Charlotte the non-referral student.

The significant difference in the number of initiations directed to students is attributable to the teacher's attempt to control Dillon's, and to a lesser extent, Zane's, disruptive behavior. Of the teachers 163 initiations, 47 are directives that simultaneously function as negative sanctions aimed at focusing students' attention on the task. Most of the initiations the teacher

directed toward Dillon (85%) are directives and only 15% are questions about the lesson material. In contrast, 40% of the teacher's initiations to Zane are directives, and 60% are questions. The teacher addressed three directives to Mindy but no questions, and two directives and six questions to Charlotte.

Although the teacher spends the most time talking to him, Dillon is not an active participant in the lesson. Out of a total of 85 utterances, only 12 are relevant to the task at hand; and of these 12, most are repetitions of answers given by other students. Another 36 of Dillon's utterances were nonsensical or irrelevant (e.g., "by, by, by" and "turkey for fifty cents").

In contrast to Dillon's gradual, and eventually total, withdrawal from the flash card lesson, Zane becomes increasingly involved. In the first phase of the lesson, Zane was sanctioned ten times and named only one of the words correctly. In the second phase, by contrast, Zane was sanctioned only once and he named six of the words correctly. Zane's improved performance over the course of the lesson may be due not only to his increasing responsiveness to the teacher's negative sanctions but also to the high number of elicitations directed to him. The teacher directed 14 questions toward Zane as compared to 4 to Dillon, 6 to Charlotte, and none to Mindy.

This difference in the teacher's distribution of talk to students had consequences for students' performance. While most of the teacher's talk was directed to Dillon and Zane, Charlotte was able to hold her own. She performed the best of the group responding 59 times out of which 31 were correct responses. However, it appeared that Mindy's participation suffered under these circumstances. The teacher did not encourage her participation as she did Dillon and Zane, and she did not assert herself as did Charlotte. She

spoke the fewest utterances and makes 10 responses, 6 of which were correct. Her performance was thus comparable to Zane's (who got 7 out of 18 correct responses) but presumably would have been better if she had received as much encouragement as did Zane. Dillon's performance was the poorest. He gave 2 correct responses out of 12 and these two answers were "leaked" by other students.

There appeared to be gender differences both in student behavior and teacher treatment. Dillon and Zane engaged in many more instances of off-task behavior than Mindy and Charlotte during the lesson. They also received more negative sanctions from the teacher than the two girls. and 1-10 for girls). In the interview, the teacher stated she felt that the class as a whole had more behavioral problems because there are nineteen boys and only seven girls in the class. One interpretation of this difference is that boys are more disruptive than girls; another is that the teacher has different expectations for boys and girls and treats them differently.

This analysis of student and teacher contributions to the lesson can be summarized in four points:

1. Charlotte, the only non-referral student, performed better than Dillon, Zane and Mindy, the referral students.

2. Dillon did not participate in the lesson despite the teacher's repeated attempts to encourage him.

3. The teacher talked to the two male referral students more often than the female referral and non-referral students.

4. Most of the teacher's talk consisted of directives and negative sanctions designed to control Dillon and Zane's disruptive behavior.

Sequential features of the lesson. A sequential analysis of the classroom transcript helps distinguish differential student behavior from differential teacher treatment. In this first sequence, students must identify words after flash cards the teacher holds up.

TURN	SPEAKER	TRANSCRIPT
168.1	Teacher	Walk. Excellent. Walk. Okay. What is this word, Dillon?
169.1	Dillon	(sounds)AAA, AAAgh.
170.1	Charlotte	Out.
171.1	Zane	(laughing) ha ha.
172.1	Teacher	Out. Good. Dillon, straighten up here.
173.1	Charlotte	Out. Teacher, he gets to say anything.
174.1	Dillon	Da, da, do, do.
175.1	Teacher	Sit down here. Straighten up. Look at me, Dillon. Dillon, I want you to calm down. All right. I want you to try.
176.1	Charlotte	Out, out.
177.1	Zane	(into mike) ba, ba, do.
178.1	Teacher	All right. You said it was out. What is this word?

The teacher asks Dillon to respond. He makes sounds instead and Charlotte gives the correct answer. Zane laughs at Dillon and the teacher negatively sanctions him. Charlotte then complains that Dillon "gets to say anything." Dillon continues to say nonense sounds and the teacher again sanctions him. Charlotte repeats the correct word and Zane makes nonsense sounds into the mike; the teacher does not sanction him but goes on to the next word.

This sequence occurs in the middle of a series of elicitation sequences:

Turn	Speaker	Transcript
193.2	Teacher	tn, tn, th. Okay. Okay. What is tnis word?
194.1	Zane	I'm thirsty. (leaves table)
195.1	Teacher	Zane. You can have a drink after we're finished.
195.2		Come and sit down, Zane.
196.1	Dillon	Okay, he's thirsty! Ha ha!
197.1	Teacher	You will stay in at recess the entire time.
197.2		And I want you to tell me why you ran off like
197.3		that. Why you didn't listen. Okay. You will stay
197.4		in the entire recess and tell me. All right?
197.5		I'm very disappointed with what you just did,
197.6		Zane. Very disappointed. All right.
198.1	Dillon	Ha. Ha. I'll pick them up.
199.1	Teacher	Dillon, pick tnem up now. Go anead. They're too
199.2		much of a mess now. Okay. What is this word?
200.1	Charlotte	Some, some.
201.1	Dillon	Turkey, turkey.
202.1	Teacher	Good. Now we will do the words you just did and
202.2		see who can get the most. Dillon, may I have those
202.3		please? All right.
203.1	Charlotte	I said the most.
204.1	Teacher	Could I nave those please We're going to do a
204.2		contest.
205.1	Dillon	Turkey, na ha.
206.1	Teacher	Now.

Zane starts to leave tne table to get a drink of water and the teacher issues a sanction to prevent nim. Dillon laughs and the teacher tells Zane tnat ne must stay in at recess. Dillon drops tne cards, the teacher continues witn tne lesson; Charlotte answers tne next question correctly.

Dillon utters nonsense words; the teacher repeats her request for him to put up the cards two more times. Soon after this point in the lesson, Dillon gets up from the table and his utterances are all either laughter or shouting "turkey, turkey" and "turkey for fifty cents." However, the teacher does not sanction Dillon for getting up from the table as Zane did a few minutes before.

Several interpretations of these differences in teacher treatment can be made. One, the teacher has given up on trying to control Dillon's behavior after having gotten no response from him and wants to get on with the lesson. Two, the teacher sees Zane as a student who is accountable for following rules such as "wait until the lesson is over before getting up"in a way that Dillon is not. The first interpretation emphasizes the organizational constraints of lessons. The second one lends support to the "differential teacher treatment" hypothesis in that the teacher seems to have different expectations for each student.

Comments made by the teacher in the viewing session about these events in the lesson support the second interpretation. At the point on the tape when Zane started to leave, the teacher said:

> ...he was just disobeying me totally that day. It was just like talking to him and he'd walk away rudely. And I thought, that isn't Zane. (3-318.3-7) ...he knows the rules that he have...(3-404.1).

The teacher said she thought Zane was behaving differently because "he knew he was being observed" and because he was "being fed by Dillon."

The only comment the teacher makes about Dillon's leaving the table and shouting "turkey, turkey," etc. is in response to the interviewer's question:

409.1 Interviewer: Now of course you have no idea of where he got the turkey thing I suppose.

410.1 Teacher: No, turkey could have come from anywhere. (hehheh) It's clever though because the concept of his head as a turkey. (hehheh)

Although Zane and Dillon engaged in similar behaviors, the teacher perceives them differently. She apparently sees Zane as a student who is accountable for the rule "wait until lesson is over before "getting up" and interprets his misbehavior as "testing me," a challenge to her authority. In contrast, the teacher does not directly comment on Dillon's rule-breaking behavior; she apparently does not view it as an instance of the same category. Instead she laughs and interprets Dillon's behavior as an instance of his cleverness.

Several interpretations of these differences can be made. One, these differences are a function of the "non-normal" assembly of this group of students. The teacher says that Dillon's behavior on the tape is representative but that Zane's is not. Two, these differences in student behavior are a function of differences in student characteristics. Three, observed differences in teacher treatment may influence student behavior, that is, the teacher has different expectations that vary from student to student and perhaps from situation to situation.

Conclusion. There were very significant observable differences in student behavior. Dillon's behavior during the lesson was almost entirely off-task, whereas the behavior of other students, both the non-referral and two

other referral students, was to varying degrees oriented to the task at hand. Student initiated activity was unevenly distributed among students and had different qualitative features (ranging from Dillon's nonsensical utterances to Charlotte's high number of correct responses). The differences in teacher treatment suggest an interpretation that emphasizes a complex interaction between teachers' categories and students' behavior rather than a simple linear relationship.

Moderate Norm Violator

Bart is a referral student who exemplifies the category "moderate norm violator." In the videotaped classroom segment, Bart's behavior differs from that of the three other non-referral students who participate in the lesson. Specifically, he becomes increasingly withdrawn from the lesson, and in the latter part, plugs his ears complaining of the noise from the videotape equipment. At the same time, other students also commit norm violations- in some cases the same ones as Bart has committed. Yet, the teacher treats them differently both during the lesson and later in her comments in the viewing session.

Information from school records. Bart is an eight year old English speaking third grader referred by his teacher for both academic and behavioral reasons, specifically:

1. disruptive classroom behavior
2. sensitivity
3. below grade level reading and spelling (trouble hearing phonic blends and decoding and sounding out letters)
4. poor fine motor control (written word difficulty)
5. poor peer relations

The SAT met in October, 1978 and no assessment was recommended. The SAT met

again in April, 1979 and considered the result of preassessment. Preassessment had concluded tnat emotionally based problems had led to difficulties including attention-getting behavior, uncooperative benavior, no close friends, reading and writing reversal preblems. When tested with the CTBS, Bart was found to be a year below grade level. Other records indicate that some testing for visual motor problems were considered and that the family was asked to seek counseling.

Students' performance in reading lesson. In addition to Bart and tne teacner, George, Chris and Mary, three non-referral students, participate in tne lesson. This group is a normal configuration that meets regularly. There were two tasks in the lesson:

1. answering questions about a story previously read
2. reading a segment of a new story aloud
3. answering questions about the new story

In the first phase of the lesson, Bart answers 4 questions correctly and 3 incorrectly. Cnris also answers 4 questions correctly but only answers 2 incorrectly. Mary answers 3 correctly and none incorrectly. George answers 2 correctly and 1 incorrectly. In terms of number of correct responses and degree of participation in the lesson, Bart and Chris performed better tnan George and Mary.

In the second pnase of tne lesson, students read out loud. Mary reads first in a smooth clear manner and is only prompted once. Bart reads next and is given four prompts and tnen on tne fifth interjection, the teacher does not supply tne word but begins a series of attempts to get Bart to sound the word out. The teacner makes six interjections concerning tnis one word while Bart repeatedly attempts to pronounce tne word. At one point the teacher puts her

hand on Bart's book to cover the last half of the compound word and Bart pulls the book away from the teacher and bends over to touch the floor. The teacher does not comment on this withdrawal from the circle, but awaits his return and continues with her insistence that Bart say the word.

George reads next and is prompted once. Chris reads last and is prompted six times. In contrast to Bart, the prompts the teacher gives to Mary, George and Chris consist in the teacher supplying the word on which they hesitate. The teacher gives them very little time to attempt to say the word nor does she require them to sound the word out. The number of prompts Chris receives (2 more than Bart) indicates that he may also have a problem in reading; yet, the teacher does not require him to sound words out as she did Bart.

One interpretation of the difference in teacher treatment is that the teacher believes Chris knows how to sound words out and is not bothering to get him to do it which she doesn't think Bart knows how. A second interpretation is that because Chris' turn occurred at the end of a sequence, the teacher could feel pressed for time and want to get on with the lesson. The first interpretation lends support to the "differential teacher treatment" hypothesis, that is, that teacher's have different expectations of students. The second interpretation focuses on the organizational constraints of lessons.

In the next phase of the lesson, the teacher asks questions about the story the students just read. Chris answers 5 out of 7 correctly, Mary answers 3, George one, and Bart does not respond at all.

The teacher then calls on Mary to read again. Mary reads with no prompts. She asks Bart if he is following along and then asks him to read; then she asks George to read. But the teacher cuts them off before they have a chance to begin and then calls on Chris to read. Chris is prompted five times, again by the teacher supplying the word.

The teacher then asks two more questions about the story. Mary gives two correct responses and one incorrect. Bart gives two responses one of which the teacher questions and the other she accepts but corrects. Chris gives one presumably correct response and one "I don't know." George does not respond at all. Overall, Bart did not do as well as Chris and Mary in the phase of the lesson largely because he did not respond to questions directed to the group as a whole. However, he performed better than George.

Student and teacher contributions. The teacher talks 43% of the time and the students talk 57% of the time. The teacher addresses 30% of her initiations at Bart, 20% to George, 20% to Mary, and 30% to Chris. Thus, while the teacher talks to Bart more than she does George and Mary, she talks to Chris, a non-referral student, as much as to Bart. The teacher directs six negative sanctions to Bart in an effort to monitor his participation in the lesson (e.g., "are you following along?"), one to Chris, and none to George and Mary.

The students' initiations are fairly evenly distributed. Chris initiates 19%, Bart 16%, Mary 11%, and George 11%. Chris and Bart also respond more often than either George or Mary, which is a function of the number of questions originated by the teacher.

Sequential features of the lesson. A sequential analysis of the transcript indicates Bart's lack of participation in the lesson may have been influenced by differential teacher treatment. In the beginning of the lesson, the teacher checks on who has finished their assignment:

Turn	Speaker	Transcript
3.1	Teacher	Okay.
3.2		Um.
3.3		How many of you finished your questions?
4.2	Chris	Not me.
5.1	George	Me.
6.1	Mary	Me.
7.1	Teacher	George, good for you and Mary.
7.2		Bart you didn't finish.
7.3		Okay. How much did you finish?
7.4		Okay. You finished three.
8.1	Chris	I finished two.
9.1	Teacher	We'll do the rest of them. Do the next
9.2		one out loud. I can't see the questions
9.3		very well from here so I'm going to ask
9.4		George to read.
10.1	Chris	Were it said what, what the night animals
10.2		like I put
11.1	Bart	I'll go read them out to you.
12.1	Chris	And then I put.
13.1	Teacher	Bart, Bart. I asked George. Thank you.

In response to the teacher's question, Mary and George raise their hands and indicate they have finished the assignment. The teacher then asks Bart if he has finished and when he says he has not, asks to see his paper. After looking at the page, the teacher announces to the group that Bart has completed three questions. She moves on to the lesson without inspecting any of

the other student's work. Chris attempts to interject that he has only completed two problems, but the teacher cuts him off stating that the group will finish the questions together.

This sequence provides a basis for a number of comparisons with similar behaviors of other students and differences in the teacher's treatment of them. First, following the sequence Bart volunteers a response to the teacher's first question about the assignment. It is incorrect and the teacher responds by asking George for his answer. Although George stated that he had finished his assignment, he did not have an answer. Yet, the teacher makes no reference to this inconsistency. After his "wrong" answer, Bart does not again volunteer a response in the lesson although he responds to her initiations.

Second, the teacher's public announcement of the status of Bart's assignment is similar to another exchange in the lesson in which the teacher requests a group evaluation of one of Bart's correct responses. Instead of responsing to the correct answer with the usual "good" or "okay," the teacher asks four consecutive questions, the last of which asking Mary and George if they agreed with Bart's answer. None of the other students' work or responses were held up for group evaluation as was Bart's.

Third, the latter part of the above sequence provides a comparison of the teacher's differential response to similar student behavior. The teacher asks George to go to the chalkboard and read off the first question. Just as George got up, he is distracted by Chris. Seeing that George was slow to respond, Bart starts to walk toward the board saying, "I'll go read them out to you." The teacher quickly admonished Bart that she had asked George to do

the task. In the teacher's interview, she commented that Bart's effort was an instance of his "manipulative" behavior. "He wants to be the one, um, all the time, you know, to have the favors." (Tea. Inter. 17-177.4-7)

Later in the lesson, George is again asked to read another question on the board. This time he responds quickly. Chris follows him halfway to the board and stands directly in front of the teacher. George relays the question to the teacher via Chris and the teacher attends to Chris even though she had assigned George the task. Chris is not cut off or in any way negatively sanctioned as Bart was when he attempted a similar action.

In the interview, the teacher says that one of the differences between the problem children and the good children was that the good students tried to please. She makes a distinction between Mike and the other students in the interview:

> ...I don't know why he behaves that way, you know. But certainly differently from the other kids. The other kids really want to <u>please</u>, most of the time you know. (17-164.18)

Further questioning by the interviewer leads the teacher to concede that Bart's effort could also be interpreted as an attempt to please her rather than to manipulate her. Although she concedes in the abstract, she says in Bart's case "somehow it's different." (17-184.4-5) This evidence lends support to the "differential teacher treatment" hypothesis that teacher's interpretations of students' behavior varies from student to student.

<u>Student behavior and timing</u>. In the interview, the teacher points to several instances on the videotape that she considers representative of Bart's "disruptive classroom behavior." While Bart is observably more mobile and

vocal at times and in ways not conducive to the lesson, similar behavior by Mary and George seem to go unnoticed and uncondemned. The difference between Bart and the other students appears to be not so much in the form but in the timing of their behavior.

One instance in which similar behaviors of Bart and another student are treated differently is an extended sequence in which Mary attempts to relocate George and Bart so she can have a clear view of the video equipment. Mary is seated behind the teacher so that her arm waving went unnoticed during the lesson. Bart complies with Mary's request to move after he is asked two questions by the teacher but before he answers the questions, interrupting an elicitation sequence between himself and the teacher. The teacher does not comment during the lesson but looks disturbed. Later in the interview, she comments that Bart moved "maybe so he could face the camera." The teacher seemed surprised when the interviewer pointed out that Mary was directing the movement and was probably trying to be in clear view of the camera. She appeared to overlook Mary's behavior even when she had a clear view of it on the video. A few lines later in the interview, the teacher comments on Mary's behavior: "Watch Mary. Somewhere along there she makes a face that was really, cracked me up at the time. She'd been really good all along, you know, and she just couldn't stand it another minute."

In the lesson, Mary continues to instruct George to scoot back unnoticed by the teacher. Like Bart, George is in the middle of a question-answer exchange with the teacher, but unlike Bart, George does not comply with Mary's request until the teacher is no longer focusing upon him. The teacher does not comment on George's move and does not appear to judge it as misbehavior.

Although Bart and George engage in the same behavior (at Mary's instigation), Bart is singled out possible not because of what he does but when he does it. Bart is in this sense "out of synchrony;" that is, he does not conceal his misconduct by monitoring the teacher's focus as the others do. Mary puts on an "angel face" whenever the teacher looks her way, but Bart did not modify his behavior according to the teacher's direction of attention.

Bart's persistently plugs his ears while looking around the room. By this action Bart violates the teacher's statement that "the best readers are the ones that follow along all the time." As Bart continues to plug his ears the teacher repeatedly asks if he is following in the book. To these comments Bart simply says "yes" and continues to plug his ears. Thus, Bart does not respond to "hints" that his behavior is inappropriate and should change. The one time that Mary is questioned about whether or not she's following leads to an obvious modification of her behavior to comply with the "good reader" methods described by the teacher. Thus, Bart does not demonstrate any compliance to the teacher's desired form of reading whereas Mary complies completely, at least when the teacher is looking.

Conclusion. While Bart's behavior is observably different from that of the non-referral students, the other students are also engaged in norm violations. The teacher notices and admonishes Bart's norm violations but tends to ignore those of the others. In addition, the teacher treats both Bart's correct and incorrect responses differently than that of the others in several instances. For example, she asks the others to evaluate his correct response and requires him to sound out a word instead of supplying the word as she does for the other students.

The instances of behavior discussed here appear to be representative of the kinds of behavior that the teacher refers to when the teacher says that Bart engages in "disruptive classroom behavior" and is "below grade level in reading." The teacher's comments about the events of the lesson indicate that these are instances of student behavior to which she is oriented.

One interpretation of the teacher's tendency to treat Bart's behavior more negatively than that of the others is that Bart did not attempt to modify his behavior according to the teacher's focus of attention. In contrast, Mary engaged in disruptive behavior only when the teacher's attention was directed away from her and then smiled sweetly when the teacher looked at her. The teacher's selective attention to student's behavior suggests another, although not an exclusive, interpretation. The teacher does not see the behavior in the same way when it is generated by different students. This interpretation empnasizes the role of the teacher's previously formed ideas about "who Bart is" and "who Mary is" and so on in her categorization of new behaviors as further instances of these student-specific typifications.

Subtle Norm Violator

Kitty is a referral student who we placed in the category "subtle norm violator." Her behavior in the videotaped classroom segment appeared to differ only slightly from that of the non-referral students. The teacher's treatment of referral and non-referral students during the segment also did not appear significantly different. However, in the interview, the teacher was oriented to what he perceived as Kitty's problems, particularly in reading. During testing it was observed that Kitty has a lazy eye and she needed glasses.

Kitty's performance on a reading test improved dramatically when she took the test with glasses.

Kitty's case is unique in that classroom observation took place prior to her referral by the teacher. Specifically, the original purpose behind videotaping a portion of this second grade classroom was to try out classroom videotape techniques. Kitty just happened to be in the group videotaped. The tape was used as data for classroom analysis when she was later referred.

Information from school records. Classroom observation and videotaping took place on the morning of September 19, 1978. Kitty was referred the following February for problems with reading. Classroom observation again took place on March 16, 1979. The SAT recommended testing. Kitty was subsequently administered the WISC-R, WRAT and Bender-Gestalt on May 24 and May 29 of 1979. Following testing, Kitty was not recommended for placement but rather was retained in her classroom.

Student performance in reading lesson. The students who participate in this reading lesson are Rachel, Michael, Jeff, Brandy, Kitty, Colleen and Tiffany. Kitty and Jeff have been referred. This group is a normal configuration that meets regularly for reading at the reading center.

There are four tasks in the lesson:
1. generating WH and CH words
2. completing the WH-CH worksheet
3. reading a segment of the story
4. comprehending the main events of the story

Kitty's performance was good in relation to the other children. She made but one error; it seemed to be more a function of situational factors than academic deficiency. She answered four questions; one required a process response, the other product. Of the four questions, Kitty missed one. This question required a product response and was addressed to Kitty on a non-voluntary basis (and was the only non-volunteer initiation).

Student & teacher contributions to the lesson. Approximately one third of the conversational turns were initiated by the teacher. Over one half of these turns were addressed to the reading group as a whole. Jeff was addressed least by the teacher (2 times) compared to the other children in the group who were addressed equally (approximately 7 times). Kitty did not stand out in being addressed more or less by the teacher.

Within the group of children, Rachel, Jeff and Michael were the primary initiators of turns. The remainder of the group (Kitty, Brandy, Tiffany and Colleen) initiated many fewer turns than did Michael, Jeff and Rachael. These children rarely responded out of turn, and generally raised their hands when bidding for acknowledgement from the teacher.

Kitty was just as likely as most of the children to be a recipient of a turn initiated by the teacher. These turns were primarily requests for information. Therefore she was acknowledged as a potential source of information. In contrast, the other referral child, Jeff, was rarely acknowledged by the teacher in spite of his efforts to get acknowledgement. Kitty was also effective in engaging the teacher; she employed an appropriate turn-taking protocol: raising her hand and waiting for teacher acknowledgement before proceeding to speak. Ironically, in following this procedure, Kitty had to work

harder for acknowledgement than those children who answered out of turn. However, Kitty's consistency in following standard protocol, regardless of the teacher's shifting critieria for student acknowledgement, was more reliable in eliciting teacher recognition than shifting from responding out of turn to in turn.

Non-verbal features of the lesson. Kitty gives evidence of being "out of synch" with the rest of the group in a very subtle way. For example, all the children were writing their names on their worksheets and shuffling through their workbooks as the teacher introduced the lesson. Kitty, unlike the rest of the children, hovered over her paper as she wrote her name. This posture makes her stand out from the group, which seems to invite the teacher's attention. The teacher said Kitty was the last to finish the worksheet. This interpretation seems to be based on her hovering posture. This posture seems to be interpreted by the teacher as "still working" when it's possible that she was "checking her work." It seems that Kitty's posture when reading and/or writing catches the teacher's attention and subsequently makes Kitty the object of focus.

Conclusion. In this lesson, Kitty's academic behavior and performance does not differ substantially from the other children in the group. In one instance she is far superior in terms of the quality of response given (e.g., Question #1) and other children in the group didn't perform as well as Kitty (Colleen and Tiffany) and one child performed much worse (Jeff). The only academic difference that was noticable was Kitty's reading; she tended to read slower and extend syllables longer in words in what seemed to be an attempt to pronounce words correctly. Part of this problem seems accountable by a physi-

cal deficiency; she has a lazy eye that must be patched frequently. Symptomatic of this visual problem is the tendency of Kitty to lean closer to the page when reading. Although Kitty's reading production seems affected by her visual problem, it is unclear from the videotape whether her reading comprehension is also affected. Events in the tape suggest that situational factors may have contributed to Kitty's inability to answer a question directed at the story contents.

Nonverbal events on the videotape and the teacher's comments in the interview suggest that because Kitty's visual problem made her stand out from the other students, the teacher may have interpreted Kitty's behavior in a way that suggested a relatively stable cognitive disability rather than a physical problem that could be easily resolved. This suggests an interpretation that emphasizes the interaction between student behavior and teacher's categories.

Covert Norm Violator

Shane's case exemplifies the category "covert norm violator" because his behavior in the videotaped classroom lesson did not appear to outside observers to be different than that of non-referral students during the same lesson. During the lesson, there was a high degree of student initiated activity, and it appeared to be evenly distributed across students and possess the same qualitative features. Each student seemed to engage in similar behavior with each other and the teacher. Yet, the teacher saw this behavior when initiated by Shane (the referral student) and when initiated by non-referral students in the lesson differently. In the interview, the teacher focused on the two referral students as deviations from the norm, but she did not attend to similar behavior when initiated by the two non-referral students

in the lesson. [5]

Information from school records. Shane is an English speaking Caucasian officially referred by his teacher on November 3, 1978 for the following reasons:

1. low academic performance
2. does not apply himself to daily class work
3. history of behavioral problems and truancy in previous district

Educational tests were administered by the psychologist, and on February 16, 1979, the placement committee assigned Shane to a Learning Disability Group program. He attended that program for one hour per day for three months until the end of the academic year. During the course of her work with Shane, the learning disability group teacher tested him. These tests indicated that his achievement was at a level that would enable him to return to the regular classroom full time beginning the next school year.

Students' performance in the math lesson. This classroom event is a math lesson involving tangrams. The students are Shane, Chris, a referral student who had been referred on another occasion,[6] and Bo and Bret. The students are asked to arrange geometric shapes into patterns and to describe how they assembled these patterns. There are three tasks in the lesson:

1. cutting and arranging materials
2. completing the first tangram
3. completing the second tangram

Shane finishes the cutting and arranging task first, Bo is second, Bret and Chris are third and fourth. Shane's speed is interesting in light of information that came out of the E&P meeting later in the year. The school

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5. cf Menan, Hertweck, Combs and Flynn (1980) for a discussion of this case.

6. Chris was referred, but he was not placed in special education.

psychologist and the special education teacher had concluded that a major factor in Shane's academic disability was difficulty in fine motor coordination; yet he completed a task quickly here.

Chris, the other referral student, finishes the first tangram first, even though he had been the last to prepare his materials. Bo finishes second, Shane third, and Bret, who the teacher considered to be the brightest student in the group, finishes fourth. In fact, Bret worked so slowly that the rest of the students started the second tangram before he finished.

Chris also completes the second tangram first. The teacher asks Chris, a referral student, to help Bret, "the brightest student," to complete his work. Bo also asks Chris for assistance. It is interesting to note that the teacher encourages peer interaction and facilitation. Shane finishes last. Overall, Shane does not do as well as Chris and Bo, but does as well as or better than Bret.

Student and teacher contributions. The teacher talks 49% of the time, and the students talk 50% of the time. The teacher addresses 21% of her initiations to Chris, 18% to Shane, 25% to Bret, and 10% to Bo; that is, 39% of her initiations are directed at referral students, and 34% at non-referral students-- hardly a significant difference. This is an unusual distribution. Bellack et al (1966) and Flanders (1970) consistently find an 80% teacher contribution. This distribution seems consistent with the teacher's conception of an ideal classroom as stated in the interview, one in which students' contribute to classroom discussion.

Students' initiations are also evenly distributed. Chris initiates 18%, Shane 13%, Bret 12%, and Bo 12%. That is, non-referral students initiate 24% of the turns-at-talk, while the referral students initiate 31% of the turns-at-talk. Referral students direct 10% more of their initiations at the teacher than the non-referral students do. Shane and Chris also respond more often than either Bret or Bo, which is a function of the number of questions originated by the teacher.

While there are some differences noted in the distribution of teachers' talk toward the students, and differences in the students' talk to each other and to the teacher, these differences in and of themselves are not definitive for two reasons: (1) the differences are not that great, and (2) we do not have enough evidence to find the cause behind the differences.

Sequential features of the lesson. Although the teacher is consistent in asking similar kinds of questions of all the students and in evaluating their responses, a sequential analysis of the classroom transcript reveals some differences in teacher treatment. In this sequence, the teacher asks students to describe how they sorted the shapes they cut out:

Sequence	Speaker	Transcript
40	Teacher	Shane, how did you sort yours? Scoot back so Bret can see them too. How did you put 'em?
41	Shane	Sort of like a pyramid.
42	Teacher	You made a pyramid?
43	Shane	Sort of like that.
44	Teacher	What are those shapes?
45	Shane	They're um, like a triangle.
46	Teacher	Are they all the same?

47	Shane	Um, yes.
48	Teacher	Okay, um, what are those two shapes?
49	Shane	This is a square, and this is sort of like a skinny diamond.
50	Teacher	Okay. Good. How'd you put yours, Bo?
51	Bo	I put all my um triangles together and then I put one, then I put all my squares, but I only have one, and my diamonds.
52	Teacher	Okay. How bout you Chris? What did you do?
53	Chris	I put the little triangles together, and the big triangles together and the diamonds separate and the squares separate and the um, middle size diamond separate, I mean, the triangle.
54	Teacher	What did you do Bret?
55	Bret	I just put the two big ones like that and the other one like that and then these two like that.

Shane is asked to respond first by the teacher. After he answers "sort of like a pyramid," the teacher responds with a series of requests for clarification and information. Bo is asked a similar question by the teacher at the end of this extented sequence. While Shane's answer was generated across a number of turns, with considerable help ("scaffolding") from the teacher, Bo answered the question in one turn.

One interpretation of this difference would be that Bo knew the answer (i.e., "is smarter"). That interpretation places the differences in student performance within the children. A second interpretation takes the organizational features of the lesson into account. Because the same question was asked sequentially of the two students, it is possible that the second student

took advantage of the information available to him in the interaction between teacher and student in the first exchange (Mehan, 1974, 1980).

Chris is asked third; like Bo, he answers the teacher's question in one turn. Bret is asked this question fourth; he responds in one turn. Interestingly enough, the quality of Bret's answer is like the quality of Shane's answers; that is, he uses "proterms" (big ones like "that," "and like that"), and does not describe the objects with mathematical terms like triangles and square. However, the teacher does not correct Bret as she did Shane.

This difference in teacher treatment can have many interpretations. One, the teacher "knows" Bret "really" knows the answer, and is not bothering to correct him, while she doesn't think Shane does "know" the answer. Two, the teacher could feel pressed for time and want to get on with the lesson, or figures that the names of objects have been discussed enough, and Bret's non-naming is inconsequential at this point. The first interpretation lends support to "differential teacher treatment" perhaps based on differential teacher expectations of students. The second interpretation makes less of these differnces and concen trates on the organizational constraints of lessons.

Unsolicited comments on the task by the students. The students' unsolicited comments about the difficulty of the task provide another basis for comparison in light of the teacher's focus in the interview upon the referral students' comments. She saw their comments as indicative of their difficulty in working alone and needing constant attention. The following Figure lists the comments made by each student during the completion of both tangrams:

--insert Figure 1.2 here--

Table 1.1 summarizes these comments:

Figure 1.2

STUDENTS' COMMENTS ABOUT WORK TASK DURING TANGRAM LESSON

CHRIS	SHANE	BRET	BO
79 It's hard.	75.1 No Way!	178 Bo got an easier one	85 The top part's right but the bottom isn't
91 This part can't tet filled.	134 Me and my big mouth	192 This one's getting to be easier.	90 The bottom part is hard.
205 I got the hardest, I think.	144 It's impossible, Mrs. Pates, to do one like this way. To do an E With one of these shapes.		94 That bottom part is hard.
260 I know I got a hard one	163 These wouldn't fit anywhere.		114 Mine's all bendy.
	203 It's impossible.		116 They're bending up and stuff.
	209 This is the hardest.		214 This is impossible.
	221 It can't (go there).		239 This is impossible.

DISTRIBUTION OF STUDENTS' UNSOLICITED COMMENTS ON TASK

	+	-	Total
Chris	1	3	4
Shane	2	3	5
Bret	2	1	3
Bo	1	4	5
	6	11	17

This table indicates that both referral and non-referral students make approximately the same number and kinds of comments about the task. Yet, during the interview, the teacher focused on the comments made by Shane and Chris and not on the comments made by Bret and Bo.

There are a number of interpretations that can be made about this difference in student behavior and teacher interpretation:

(1) the instances of behavior we have listed in Table 1.1 are not representative of the kinds of behavior that the teacher refers to when she says that the students are "constantly needing attention." While we cannot discount this interpretation because of our small sample of classroom interaction, there is some evidence that we do in fact have a good sample of behavior: the teacher points out the behavior of Shane and Chris as representative of her referral reason. That is, the teacher's own self report indicates that this is a sample of student behavior to which she is oriented.

(2) the teacher has a different way of orienting to the four students, such that she does not see the behavior in the same way when it is generated by different students. That is, the students' behavior is part of a gestalt, an ensemble of behavior (Gurwitsch, 1966), that is different for the different

boys. This interpretation emphasizes the role of teachers' categories in the interpretation of behavior. It suggests that the teacher is not perceiving classroom behavior directly; instead, it is mediated through a system of categories that varies from student to student, and perhaps, classroom situation to situation.

Conclusions. While there are some observable differences in student behavior the differences are not significant in amount or degree. Student initiated activity appeared evenly distributed among students and had the same qualitative features. The teacher treated differently behaviors of referral and non-referral students which appeared similar to an outside observer. The differences in interpretation between the teacher and the outside observer suggest an interpretation that emphasizes the role of teachers' categories as a mediating factor in their interpretation of students' behavior and ultimately, their decision to refer students for special education.

Accounting for the Variability in Referral Student Behavior

There was considerable variability in the behavior of the referral and non-referral children within one classroom, and there was considerable variability in the behavior of referral children across many classrooms. That is, all the students who were institutionally classified as belonging to the same educational category e. g., "Learning disabled," or "No assessment recommended" (see career paths #10 and #2, respectively, on Figure 1), did not give evidence of the same classroom behavior, as indicated on official school records and by observations of teacher-student classroom interaction. We will now discuss some of the reasons for this variability within and between classrooms.

Elementary school classrooms, like other institutional systems have a normative component. There are rules or norms which presumably guide classroom behavior, both academic and social. Norms may be explicit (e. g., 10 wrong on a math test results in a failing grade, and a missed recess). Or, they may be implicit (e. g., raising one's hand may be necessary for getting teacher attention). Furthermore, norms may vary from context to context, (e. g., raising one's hand may be necessary for teacher acknowledgement within a math lesson, but not within "show and tell time." Or, they may vary across classrooms (e. g., saying "teacher, teacher" as a means of getting teacher attention may be within the rules in one classroom, while hand raising may be the rule in another).

Associated with norms for classroom behavior is a tolerance range. Certain types of student behavior will be tolerated within this range, while behavior that falls outside this range will not be tolerated. Like classroom norms, these tolerance ranges may vary from context to context within a given classroom, and from classroom to classroom. And, like classroom norms, these tolerance ranges may be explicitly or implicitly communicated to students.

This classroom normative system with explicit or implicit rules operating within a tolerance range has characteristics like a "normal" or Gaussian curve. It is clear from our reasearch that teachers have categorical representations for their students' classroom behavior. They have categories for acceptable classroom behavior, and the behavior that is acceptable is distributed within that category. Some behavioral instances are more representative of the category of normatively acceptable behavior than others. Based on this distribution, the "mean" can be defined as the most prototypical instance

of the teacher's category of normative behavior (e. g., it is the most representative of the category). Deviations from the mean will be indicative of behaviors that are less prototypical of the normative category in question. Therefore, the "further" that a given instance of classroom behavior deviates from the mean, the less prototypical it is within the teacher's category. Carrying this analogy further, a teacher's tolerance range for the deviation in behavior away from the prototype of a particular category is the "standard deviation" away from the mean. Instances of behavior that fall within this critical deviation range will be tolerated. By contrast, instances of behavior that fall outside the critical are unacceptable.

The normal curve metapher of prototypical classroom behavior provides a helpful framework for understanding the variation in referral student behavior both within and across classrooms. Specifically, students who exhibit prototypical behavior (i. e., behavior that lies within the teacher's tolerance range are "normal students." Students who exhibit aprototypical behavior (i. e., behavior that lies outside the teacher's tolerance range) become candidates for referral. That is, referral seems to result from teachers' perception of students' classroom behavior as defined in terms of their prototypes for normative behavior and corresponding tolerance range.

Furthermore, the parameters of prototypical categories and tolerance range are not static; they are dynamic. They are subject to change from moment to moment, student to student, classroom situation to classroom situation for a given classroom teacher. Likewise, teachers in different classroom situations may not have the same prototypes or range of tolerance. It is this context-specific characteristic of teachers' prototypes and tolerance range

tnat seems to account for the variation in students' benavior, botn within and between classrooms.

Once we realize tnat teacners nave different tolerance ranges for classroom benavior, and are employing different prototypes for normative behavior, it is no longer surprising tnat "similar" benavior will be judged differently by different teachers. What counts as "unruly behavior" for one teacher does not necessarily count as "unruly behavior" for another teacher because teachers nave different norms and tolerance ranges.

So, too a given teacher has different prototypes for different students and different situations within a classroom. This context specific chararacteristic seems to account for the variation we have observed within one classroom, wnere we nave described instances wnere "the same" behavior when exhibited by one student is called by tne classroom teacher an instance of referrable benavior, but when tnat same benavior is exhibited by another student, it is not identified in tnis way, i. e., it is seen as normal, or routine benavior.

Conclusions

Tnis variability in behavior of referral and non-referral students in and between classrooms mitigates against a behavioral basis of teachers' referrals. That is, the reason for a teacher's referral is not to be found exclusively in tne characteristics inherent in students' actions. Likewise, tne expectations that teachers develop about students prior to interaction witn tnem does not account for teachers' referrals. That is, teachers in tnis study did not give evidence of forming judgments about students that were com-

pletely impervious to what students did in subsequent classroom interaction. Instead, teachers' referrals seem to be influenced by an interaction between prototypes that teachers form about students' and students' classroom behavior.

Nevertheless, this phase of the study points out the importance of teachers' categories. Teachers seem to interpret students' behavior as a further instance of existing notions. Furthermore, this phase of the research seems to confirm previous research on category formation. Once categories are formed, they are extremely resistant to change, even in the face of contradictory evidence.

Because this phase of the project points out the importance of teachers' categories in making judgments about students' success or failure in classrooms, we will explore the issue further in the sections that follow. In the next Section, we examine the influence that teachers' ideas about students have when they are communicated to school psychologists. We also examine the basis of testers' judgments about students' performance during testing situations. In Section 4, we explore the dynamics between teachers' categories and students' behavior further.

SECTION 2. PUTTING PSYCHODIAGNOSTICS TO THE TEST

This section of the study examines the educational testing practices involved in identifying, assessing and placing students in special education programs. The "careers" of two students, one "learning disabled," the other "normal," are traced from the classroom through educational diagnosis. Before presenting the details of these two cases, the emergence of the notion of

"career" and the role of testing in educational testing will be reviewed.

Identity Construction and Career Patns in Organized Contexts

The concept of career was originally developed in studies of occupations, referring to an individual's sequence of movements from one position to another in an occupational system. This model was transformed by sociologists for use in the study of deviance (Hughes, 1945, 1958; Becker, 1963). Deviance, in labelling theory, has sometimes been viewed as a "career." A "deviant career" entails the actual progression of a person through a series of positions in a social system. A career in this sense implies a potential beginning, intervening stages with distinctive features, and an end. Consequently, the deviant label may or may not become the basis of a lasting or substantial identity. Labelling is considered the primary determinant of lasting career deviance. Rather than being a quality of an act, deviance is the consequence of the "application by others of rules and sanctions to an 'offender.'" (Becker, 1963:9).

Medical Career Patns

The value of employing the career concept has been extended to the study of health and illness (e.g., biological, organic, and mentalistic) (Parsons, 1959; Goffman, 1961; Scheff, 1966; Lemert, 1967). The identity that arises from the perception of others that an individual is "sick" affords the person with a label and a set of expectations - a role grounded in the expectations and perceptions of others. Whether the "sick" person's identity is imputed or ascribed by others or s/he views his/her behavior as others do, the identified person has at least for the moment strayed from one path (health career) to

anotner patn (illness career), and will remain there as long as tne "sick" label is successfully applied.

Illness need not lead an individual to a deviance career. It can be "normalized" if tne illness is seen as curable by others and unintended on the part of tne person identified as sick. However if s/he is seen as responsible or the illness is seen as incurable, tne definitions of others become especially important since tney influence and are influenced by tne activities of organized agencies of social control, (e.g., health care facilities, state mental nospitals, and renabilitation centers).

Frake (1961) nas demonstrated tnat in preliterate societies, tne notion of a cnronic illness that can improve does not exist. During a remission for example, one is still not sick but rather s/he is well. Subsequent symptoms are viewed as manifestations of a new illness or of tne same illness tnat has been improperly cured. In otner words, health and illness are mutually exclusive conditions (career patns) -- you are eitner sick or not sick. A good cure eliminates symptoms permanently. Recurring symptoms[7] reflect a weak and poor nealer; they do not reflect upon tne "patient."

Special Education Careers

Medical careers of illness are not unlike educational careers for learning disability students. All career patns are alike in that they are fused ultimately with tne perceptions and judgements of others, a specialized community of individuals. Tne "professional" person's judgement about

7. It nas been suggested tnat disease does not actually exist in preliterate settings. Signs, symptoms, and disabilities exist and are interpreted and acted upon in terms of group concepts and beliefs.

"handicaps" depend upon his or her norms or learned conceptions (shared with other professionals). Educational labels (diagnoses) are rendered when evaluations (examinations) show that deviance from normative criteria is manifest. The concept of "handicap" becomes equivalent, socially speaking, with that of a disease.

The equation of "handicap" with "disease" seems prevalent in the field of special education. Learning disabilities have become defined in terms of organic and neurological dysfunctions of the cerebral process. Coles (1978) concludes that specialists in the field of special education have resorted to biological explanations for institutional failures, focusing our attention, concern, and attempts at remediation on the child, rather than on the social context in which the child must perform.

Coles makes the connection between the medical version of careers and the educational version of careers explicit. He finds "the medical model" operating in both contexts:

> Using a medical model and equipped with their own black bag of diagnostic instruments, the learning disabilities specialists, sometimes with other specialists, examine child patients. If they think there are learning disabilities, they write authoritative diagnoses stating that, based on the results of certain tests, it has been determined that the children have neurological problems that impede learning... Because the children have been given a set of seemingly scientific and valid tests, the conclusions must be valid. The children, now proclaimed to be learning disabled, begin with the remedial path toward cognitive competence. (Coles, 1978:314)

In the school context, both the designation of a handicap as "academic" (mental) and the designation of a handicap as "behavioral" (physical) are the result of decisions made by professionals based on a series of observations

and inferences, regardless of the sources of their data. Professionals validate and label behaviors and in this way they play an important role in creating handicaps, and by extension, handicapped school careers.

Educational Testing and Special Education Careers

As we indicated in the Introduction, there are normal career paths and special career paths through school. To get on a special career path, students are identified as educationally handicapped and removed from their regular education classrooms during the school year, and are placed in a variety of "special education" programs within the school district. In the event that an appropriate education program is not available for the handicapped child residing in its jurisdiction, they are placed in a special school outside the public school system. Yet another alternative is to keep the child at home with special tutoring (see Figure 2.1 for a model of special education services).

--insert Figure 2.1 here--

This section of the study examines educational testing practices that are involved in moving students from regular classrooms in the public school to special education classes in the regular school system (Level I and III in Figure 2.1).

The Role of Testing in Eucational Decision Making

Working with individuals in educational environments naturally entails decision-making. A teacher decides whether each student is ready for long division, or more importantly, is ready to move on to the next grade. Decisions, of this kind, involve making predictions about a student's chance for

MODEL OF SPECIAL EDUCATION SERVICES

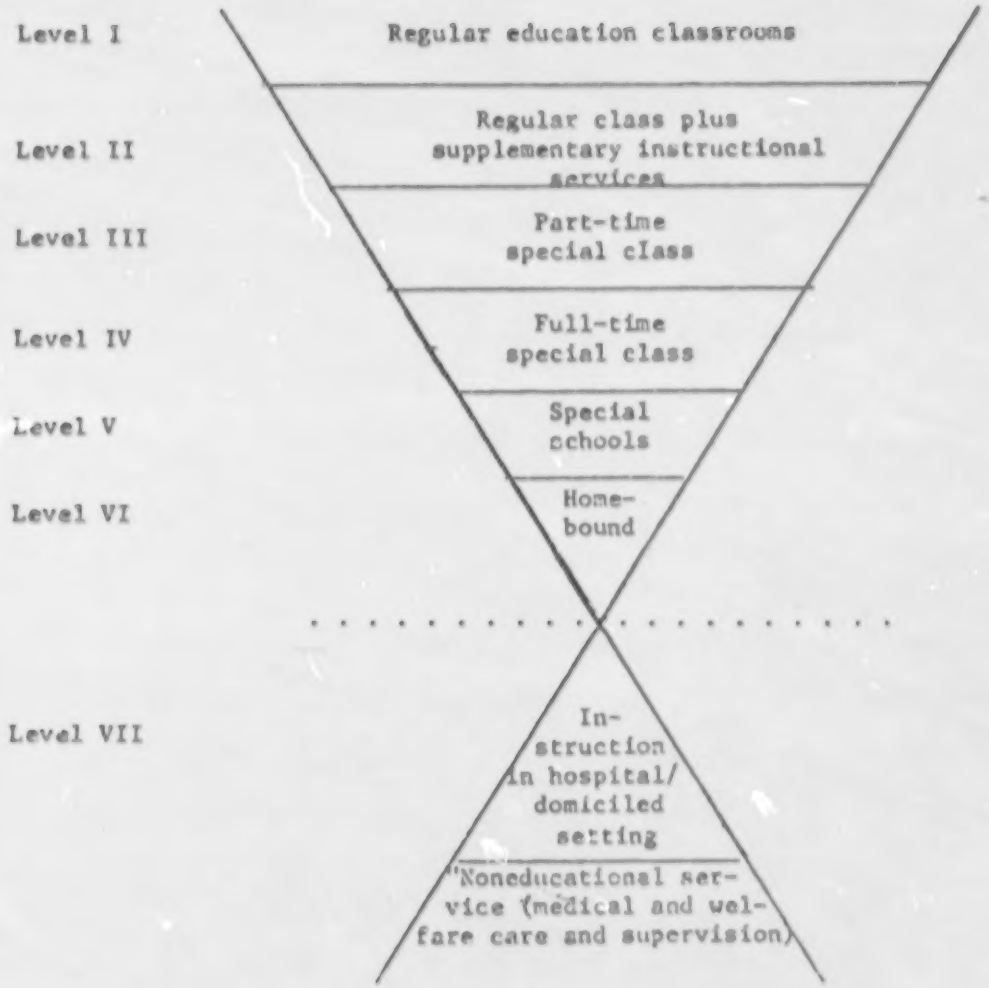

Figure 2.1

success or failure on particular occasions. Like the classroom teacher, the school psychologist also predicts success or failure for certain academic activities that have practical consequences. But unlike the classroom teacher, the school psychologist calls upon a sophisticated technology of psychological and educational tests to make decisions.

Researchers of schools have long been concerned with testing and its apparent role in making decisions about students' careers. There are a great variety of tests, covering numerous identifiable characteristics. Even for a single characteristic such as mental activity, there are many tests which have different uses. If we are to believe that tests are in fact standardized instruments that objectively measure differences between individuals, or between the responses (performance) of the same individual across different occasions, then we can readily accept the psychologist's diagnoses (e.g., learning-disabled) and the resulting consequences (e.g., special education placement). The degree of distinction between diagnosis and prediction is a minor one. Consider, for example, a test of visual recognition. The psychologist flashes a row of letters before a child for a time and the child reports what (s)he has seen. Some students may recognize and recall four letters, while others grasp seven in the same brief interval. This disparity becomes important when the tester relates it (the student's performance in the testing situation) to some other behavior (the potential for performance in the classroom). The psychologist's diagnosis of a child as having a visual recognition disability implies a prediction for how he or she will do in other situations, e.g., performance in a particular classroom reading group.

Instead of accepting the assertion that tests are standardized instruments that render decisions automatically, we are rendering the testing process itself problematic by taking a closer look at assessment practices themselves.

The Roots of Controversy

We are not the first to raise questions about the problematic nature of psychological and educational testing. Testing has a long history, both as a practice and as an object of research. The field of standardized testing grew from the soil nourished by the early experimental psychologists who were developing psychological methods, and by the efforts of Galton in England, Cattell in America, Kraepelin in Germany, and Binet and Simon in France, to develop an objective instrument to measure individual differences in intellectual ability for educational, military, employment, and therapeutic purposes. Although an historical overview of the origins of psychological and educational testing would provide a perspective that would aid in the understanding of present-day testing practices, it is not within the scope of this report.

Today, tests are regarded as indispensible and are, for the time being, here to stay despite all the doubts expressed about their validity. Educational and psychological tests continue to play an important role in decision making about students' success or failure in school. In fact, schools are presently among the largest test users. Students face intelligence tests almost from the day they enter school. Usually, students first come across the Stanford-Binet or Wechsler IQ tests, given to more than 2 million children each year.

Even so, the case for testing is hardly proved. There have been countless articles written about the cultural bias of educational tests. Tests have been primarily standardized on the "non-handicapped" and are inadequate for individuals diagnosed as having different needs and opportunities for learning from the majority and whose individual characteristics create barriers to test administration and interpretation. [8] Critics claim that often the tests are misused to track black and other minority children into inferior programs. There has been a call for a moratorium on intelligence testing or the replacement of IQ tests with criterion-referenced measures, and even forsaking of tests altogether (Bosma, 1973; Bransford, 1974; Hobbs, 1975; Laosa, 1973; Larry P. v. Riles, 1972; Reynolds, 1975; Rudman, 1977; Nader et al, 1980). [9]

Even among the most faithful proponents of testing, there is a shared concern that individual tests of intelligence and achievement present us with difficult choices concerning their meaning and validity. The following quote from Arthur Jensen (1969, p. 183), one of the staunchest supporters of testing today, illustrates the problematic nature of intelligence tests:

> When I worked in a psychological clinic, I had to give individual intelligence tests to a variety of children, a good many of whom came from an impoverished background. Usually, I felt these children were really brighter than their I.Q. would indicate. They often appeared inhibited

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8. The Wechsler Intelligence Scale for Children (WISC) was the test analyzed in greatest detail for our study. The WISC was standardized on 2200 white boys and girls in the U.S. selected to be representative of the 1940 U.S. census. However, in the standardization group there was an overrepresentation of children from the middle and upper socioeconomic levels. Therefore, children from ethnic minority groups, or from lower socioeconomic groups, were not represented adequately in developing norms.

9. The 1.8 million-member National Education Association is campaigning to abolish standardized testing in public schools.

> in their responsiveness in the testing situation on their first visit to my office and when this was the case, I usually had them come in two or four different days for half hour sessions with me in a 'play therapy' room in which we did nothing more than get better acquainted by playing ball, using finger paints, drawing on the blackboard, making things out of clay, and so forth. As soon as the child seemed to be completely at home in this setting, I would retest him on a parallel form of the Stanford-Binet. A boost in I.Q. of 8 or 10 points or so was the rule.... I would put very little confidence in the single-test score, especially if it is the child's first test and more especially if the child is from a poor background and of a different race from the experimenter.

This anecdote points out nicely the possible significance of the examiner-examinee relationship, especially when they don't share ethnic or cultural backgrounds, as well as the importance of the relationship between the environment and the child.

Constraints in Controlled Contexts

The educational test is built on the assumption that the test content is the stimulus to which the student (examinee) is responding. What has not been seriously enough considered are the contextual/environmental features affecting test performance and the resulting outcome, i.e., the structural form of the standardized test situation and its relationship to the interactional features (structurings) embedded in it (Mehan, 1978). The environmental demands of the testing encounter both help to guide observed behavior and establish limits to the range of response options available to the student, thereby helping to shape the characterization of the child as learning-disabled. Traditional learning theory has been committed to the stimulus-response (S-R) formula (Spence, Hull, and Skinner). For Estes (1970), however, the association is not merely the connection of stimulus with response but

usually a matter of learning the relation between events. This, then, is more a stimulus-stimulus (S-S) than a stimulus-response theory.

The double bind. When a child is constrained in a testing session (or in the classroom), he or she may in fact "act out" and "become" the very category (e.g., educationally handicapped) for which (s)he was referred. That is, what at first may be an isolated incident of "referrable" behavior in the classroom could then lead the child to a testing situation which is often complicated by a contradictory and obscure system of rules and instructions. This places the child in an apparent "no win" situation that can become an educational grave for a student who is referred to testing. [10]

Tests of all types are samples of behavior in particular, limited contexts. Testers draw upon previous experience with particular tests to inform them about the test at hand. They also draw upon experiences with the child, usually through teacher information, the written referral form, official school records that house previous test scores and information about the child's family and home. It is seldom the case that diagnosticians directly observe or interact with children referred to testing prior to assessment sessions, but rather rely primarily on textual data from other sources

Testing encounters often work, unintentionally perhaps, to confirm and validate pre-established categories about referred children - a circumstance that double-binds the participants. It would be incorrect to imply or assume

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10. At the age of 6, Daniel Hoffman, a student in the New York City Public Schools, was tested and then placed in a program for the mentally retarded. Hoffman remained in special education classes for his entire school career, when in fact he was a child of normal or slightly above normal intelligence. (The Testing Digest, 1980).

tnat if tests were simply designed better or "fairer" tnat the problems would be solved. Tests depend a great deal on their very nature and the way tney are administered.

Test benavior. The examination session is as mucn an interaction between two individuals (tester and student), as it is an interchange of test questions and examinee responses. Everytning tnat takes place from tne initial encounter to tne termination of the contact between the tester and the student, as well as the child's case nistory, constitutes data for analysis.

Underlying all tests of ability is the assumption that the child (examinee) is "doing his best." Consequently, tne examiner attempts to create conditions at the outset to "put the child at ease" so that he will put forth his maximum efforts throughout the testing session. A number of studies concerned witn tne influence of different incentives (e.g., verbal encouragement and additional cues) and disruptive conditions (e.g., loud noises, ridicule, or discouraging remarks) upon test performance, nave shown scores to raise or lower appreciably with certain groups.

The state of botn tne tester and tne student are critical factors affecting the testing session. Fatigue, motivation, and incentive, or problems at nome can adversely affect a student's response, wnile simultaneously influencing the tester's impression of the referred child. The student's fear of failing or notorious shyness may look like inattentiveness or uncooperative benavior. The state of the tester can also influence the way instructions are given. To put tne child at ease, the WISC-R manual recommends that the tester engage in "some informal conversation before getting down to the more serious business of giving the test." If the child inquires as to why (s)ne is being

tested, the tester should clarify these concerns "in a truthful and nonthreatening" manner. In most cases, in our study, the tester explained to the child: "We're going to do some fun things ... We'll do some blocks and we'll do some puzzles, and we'll do some things like that ... Most of them aren't academic... they aren't about arithmetic and reading and that kind of stuff." These kinds of false-promises were frequently made to students. When queried about why they had to be tested, testers often told the children that they were "special" and that: "All the other kids from your class wanted to come but I had to tell them no, I was just going to work with you today because you're special." We are not doubting the psychologist's sincere motive to put the child at ease, but we must question the employed strategies encouraged by the institutionalized system of testing when faced with such student responses as: "I'm nervous," "I'm tired," "I can't do this," and "I don't want to be here." Several children yawned throughout most of their testing sessions and one went so far as to exclaim "I'm bored!" over and over again. One child was so frustrated he broke down in tears. In this instance, the psychologist talked with the child at length and in a highly sensitive manner, then rescheduled the tests for another day.

Closely related to test-taking motivation is the issue of test anxiety. Sarason and his colleagues (1964) studied the effects of such anxiety with both school children and college students, and concluded that test anxiety noticeably interferes with effective learning and test performance. The direction of causal relations remains unclear, however. Is anxiety something already "in the child," and if so, is it due to previous experience with test failure? Or, is test anxiety "in the environment," i.e., is it inherent to testing conditions? There is no definitive statement as yet about this

question of directionality: what comes first, the situation or the behavior? The distinction between motivation and test anxiety, whether inherent in an individual or situation, or constitutive on the part of the child, tester, and situation, is one of degree, rather than being a twofold division. It may well be that on some occasions the examinee's behavior is primarily a reaction to the examiner's behavior rather than a reaction to the test demands. Administering, scoring, and interpreting individual psychological (intelligence) tests are by no means so standardized that any aspect of the individual differences among testers and examinees can be ignored.

Although any unusual frustration or anxiety observed on the part of the student was noted in the psychologist's report, it is interesting that unusual conditions in the testing environment (e.g., someone else entering the room, disruptive noises, or observed restlessness on the part of the tester) were not considered in the test interpretation, nor were they reported to the decision making committee that determined the child's educational placement.

Methodological Approach

Database

The data for this analysis were collected over a period of one year. From December 1978 through December 1979, we videotaped twenty (20) testing sessions between two school psychologists and eight "referred" students. We set up the videotaping equipment inside the testing room and waited outside until the testing session was completed. A microphone was placed on the testing table between the examiner and the child. The videotapes of psychological and educational assessment sessions were viewed by the psychologists who had

administered the tests and informal interviews were held during the "viewing sessions." (For a list of all the tests administered to the students we videotaped, see Appendix I). The 20 "hours" of testing and subsequent interviews with the psychologists served as our corpus of materials for analysis. [11]

Data treatment

To protect the original data tapes, duplicate tapes were made. Only these copies were used in our treatment of the data. The audio portion of each testing tape was rerecorded separately on audio cassette tapes for the purpose of transcription. After the audio portion was transcribed, it was checked against the videotape for accuracy. At this time the draft transcript was filled in with non-verbal behavior (e.g., when a test required that the student point to something rather than say a response), speakers' identities, the running time of each hour at 15 second intervals, length of pauses, and some talk that became clear when viewed in its context (see Attachment I for an example of a transcript, and Attachment II for a reader's guide to transcript symbols).

Individualized tests of intelligence and the WISC-R

Proponents in the testing controversy (Jensen, 1969; Shockley, 1972; Herrnstein, 1974; Wechsler, 1974) describe tests as objective, standardized and norm-referenced. A standardized test is one in which procedure, apparatus, and scoring have been fixed so that precisely the same test can be

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11. The term "hour" is used for two reasons: (1) the Sony videorecorder employed most often could only record for one hour before changing tapes. On a few occasions we used a recorder (Betamax) that could run for 2 hours, and (2) the testing sessions averaged about 1 hour in length each.

given across different occasions. The emphasis here is standardization of procedure. Technically, testing kits are uniform; however, the interactional and practical consideration are far from it. For example, in the school district we studied, children were either taken out of the classroom or were tested during vacation periods. Neither of these situations is recommended in the testing manual's "directions for administration," nor are they conducive to optimal desired test-taking procedures. [12] The WISC-R manual makes it clear that "it is best to discontinue the test and arrange for another appointment," when satisfactory conditions are not met. However, due to tight scheduling problems and a backlog of cases, this was not often possible.

The assessment and diagnosis of referred students was ordinarily left to the school psychologist who generally administered, in an hour or so, a psychometric battery, consisting of individual tests of intelligence, achievement, and social and personal adjustment. The WISC-R (Wechsler Intelligence Scale for Children-Revised) was the most frequently administered test to the referred children in our study. The WISC has been designed and organized as a test of general intelligence. [13]

The WISC-R consists of 12 subtests: 6 on the Verbal Scale and 6 on the Performance Scale. (See Appendix II for a description of the WISC-R)

VERBAL PERFORMANCE

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12. The testing manual and tests referred to in this section are from the WISC-R, unless otherwise specifically noted.

13. Wechsler published the WISC in 1949. It was revised and renormed in 1974 as the WISC-R. Wechsler believes that it is possible to measure general intelligence objectively, "and that, by so doing, one can obtain a meaningful and useful index of a subject's mental capacity."

1. Information	2. Picture Completion
3. Similarities	4. Picture Arrangement
5. Arithmetic	6. Block Design
7. Vocabulary	8. Object Assembly
9. Comprehension	10. Coding
11. Digit Span	12. Mazes

Administering the WISC-R. Certain practical problems of administration are common to all tests. First, the physical make-up of the testing room should be well ventilated, have good lighting, and there should be ample space to work. The WISC-R manual states that children should be tested in comfortable surroundings. Suitable testing areas were evidently hard to find by the school psychologist in our study. At one school, the psychologist administered tests in the nurse's office. At another school, tests were administered in a room that doubled as a storage space. These testing areas were adjacent to teacher lounges where groups of people could be overheard during testing sessions.

The second point we want to make is with regard to establishing and maintaining rapport. The WISC-R testing manual also says it is highly important that the examiner be a familiar person with whom the child feels comfortable. The school psychologists barely had time to complete a "case," much less make themselves familiar with the students referred to testing. The testing literature informs us that testers are trained to think of themselves as unemotional, impartial task-setters. The school psychologist's traditions encourage the idea that she, like the physical scientist, is "measuring an object" with a technical tool.[14] In this way, intelligence is viewed as an attribute of the individual and can be compared to the domain of temperature.

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14. The psychologists who participated in our study were female, hence the use of 'she' when referring to testers.

The thermometer allows for the objective measurement of temperature; the intelligence test allows for the objective measurement of intelligence. The "object," however, is a person and involves a complex social relationship between the child, the examiner, and the conditions (situational features) of testing. Testing encounters are practical activities; they are social accomplishments (constructions). While presumably maintaining an impartial and scientific attitude, examiners attempt to obtain from each child tested the best accomplishment she or he can produce, and the examinee trys to provide the tester with the response that she has in mind. Participants engage in the social enterprise of 'testing,' actively constituting the ongoing interaction and resulting outcomes (e.g., test scores and psychological reports that lead to special education placements).

Following is a description of the analytic devices employed in this phase of the study.

Analytic Devices

The first step of data analysis was a segmentation of the testing session. Testing encounters were generally segmented into (1) informal openings, (2) various individualized tests ("on-task" time), and (3) a closing down of the hour by the school psychologist (see Figure 2.2).

--insert Figure 2.2-The Segmentation of a Testing Session-here--

Informal transitions and "off task" sequences cropped up regularly as part of the whole testing scenario. Internal analyses of the different segments (on-task and off-task) are a continuing concern. This segmentation of a testing session into its component parts is important in order to reduce a conception of a testing tape to a visual page representation. This data base provides a

THE SEGMENTATION OF A TESTING SESSION

Segment	Informal Opening	Formal Testing		Closing	
Type of Sequence	Initiation	Instructional Question		Initiation Interrogative	Initiation Informative
Sequential Organization	I-R-(EC)	IN-R	Q-A-(E)	I-R (Int)	I-R (Inf)
Participants	T-S-(T) S-T	T-S	T-S-(T)	T-S S-T	T-S S-T

Figure 2.2

Key: I=Initiation; R=Response; (EC) or (E)=Optional Evaluation; IN=Instructional; Q=Question; A=Answer; Int=Interrogative; Inf=Informative; T=Tester; S=Student.

basis of comparison across students and across different tests.

The next step was to extract an overall event structure from each individual testing session. The event structures (see Figures 2.3a and 2.3b below) revealed in a temporal snapshop the length and number of off-task times with respect to on-task time, as well as external disturbances during either sequential event. Some sessions were interrupted "from the outside" as many as fourteen times (e.g., recess bells, intercoms, someone else entering the room). Breaches in on-task time, i.e., formal testing, were frequent for all sessions and in several cases directly linked to the external break-ins. The informal opening sequences varied from fifteen seconds to six minutes. The event structure charts were coded to make locating certain phenomena easier (see Figure 2.3b). Coding was merely a heuristic device employed to unveil in a photoplay representation the interaction that flowed on videotape. In a glance, particular sequences can be located (e.g., Q-A-E; Q-A-Q:RC-A) as well as any external stimuli occurring simultaneously.

--insert Figures 2.3a and 2.3b here--

Questions for Analysis

In this section, we trace the career paths of two students identified as special education candidates by their classroom teachers and subsequently referred for assessment and diagnosis by the school psychologist. In analyzing these two cases, one a "learning disabled" student, the other a "normal student," we proceed along three lines of investigation: (1) an examination of the social construction of tests (2) a review of the psychologist's diagnosis of students' performance, and (3) the use of diagnostic data in formal decision making situations.

EVENT STRUCTURE CHART

0:15:30:45:1:15:30:45:2:15:30:45:3:15:30:45:4:15:30:45:5:15:30:45:6:15:30:45:7

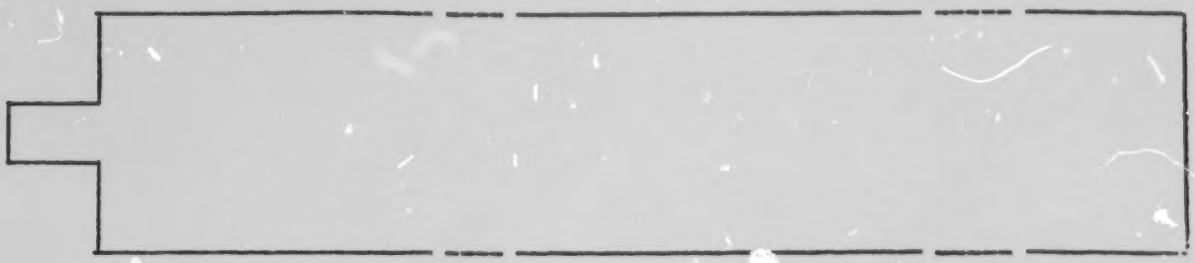

Figure 2.3a

0:15:30:45:1:15:30:45:2:15:30:45:3:15:30:45:4:15:30:45:5:15:30:45:6:15:30:45:7

IN Q E+E+ . . Q . A A . Q . . (A) Q (A)Q (A) Q (A) . . QRC Q Q .

Open . A Q Q . . . . E+ . Q (A) Q(A) QR A Q . . A (A)(A).

. . A A Q A A QR QRC. . A IN Q (A) QC(A)Q (A) Q (A) . . E+ . IN .

Figure 2.3b

Key: Open=Opening sequence; IN=Instructional sequence; Q=Question; A=Answer/verbal; (A)=Answer/nonverbal; E+=Evaluation/positive; QR=Question repeated; QRC=Question/Request for Clarification; QC=Question/Cue; .=Continuation of sequential act

_____ = Informal off-task time (e.g. Opening and Closing moves)

_____ = Formal on-task time (e.g. Individualized tests)

--------- = Break in formal testing (off-task)

// = External interruptions (e.g., bell ringing; someone else entering the testing room)

To read: top to bottom, e.g. Q
A
E+

The first question concerns the social organization of educational testing. How are formal tests assembled? In the context of the testing event, what contributes to a student's answer (e.g., cognitive, interactional and situational features)? How does the psychologist determine whether a student's behavior counts as a correct answer, or overall performance counts as evidence of an educational handicap.

The second set of questions concerns the diagnosis of students' performance. How does the psychologist identify the student's disability? What sources of information inform this diagnosis (e. g., teachers' formal reports, informal discussions, school records, or others?).

The third set of questions concerns the use of information (textual records) produced about the student in different contexts (i. e., classroom and testing). After a testing session is completed, the psychologist must prepare a recommendation about the student who has been tested, and present it to the committee that decides the educational category placement for the child. How is this information about the child from the classroom and the testing situation made available to decision makers and subsequently used to decide special education placements?

Assembling the Formal Test

The "Formal Test Assembly" topic is informed by previous work on the interactional construction of educational test results. Mehan, 1973, 1978; Roth, 1974, 1980; Mackay, 1973, 1974; and Davies, 1978 have shown that treating test results as social facts obscures the constitutive process by which testers and students jointly produce answers in individual tests. As a

result, educators and researchers do not have access to students' reasoning, which is the very thing tests were designed to measure.

In order to address these issues, it is necessary to re-assemble the individual tests and check them against testing manuals for the manner of administration and scoring of responses. This process has enabled us to score the test responses as the tester did and ascertain the child's overall performance.

"Reassembling the tests" also means breaking down the formal on-task sequences into analyzable form (see Figure 2.4 below). While Sacks et al (1974) say that everyday conversation has many two-part sequences, some investigators of the classroom have found that formal lessons seem to have a three-part structure (Initiation-Reply-Evaluation) (Mehan et al, 1976; Mehan, 1979). Canonically, educational tests are supposed to leave the influence of the everyday world at the door, and therefore one would expect a two-part sequence again. In everyday conversations, turns are negotiated at the end of a speaker's turn, i.e., at a turn allocation juncture; so the "two-ness" is an open possibility. The "two-ness" of a formal test, however, comes from a built in constraint on the tester not to give information away. This is not to say that three-part (Q-A-E) and even longer sequences do not exist (see Figure 2.4), but generally, formal task sequences consist of question-answer pairs.

--insert Figure 2.4 here--

THE ASSEMBLY OF A FORMAL TEST

Test	WISC-R: Information Sub-Test		
Type of Test	Verbal		
Sequential Organization	Format I Q-A-(E)	Format II Q-A-Q:RC-A-(E)	Format III Q-A:RC-QR-A-(E)
Participants	T-S-(T)	T-S- T - S-(T)	T- S - T -S-(T)

Figure 2.4

Key: Q=Question; A=Answer; (E)=Optional Evaluation; Q:RC=Question: Request for Clarification; A:RC=Answer:Request for Clarification; QR=Question Repeated; T=Tester; S=Student.

Opening up Openings

Informal opening sequences took place prior to the the first formal testing sequence. This was an attempt by the psychologist to "get an idea of the child's general awareness."[15] This was done by eliciting information from the student about his family and classroom life and then asking questions of a more academic nature while still under the informal guise.[16] The following two excerpts from different transcripts are typical examples of what occurred during these informal openings.[17]

Sequence #	Speaker	Transcript
53:21.0	Tester	Heh by the way how's your brother Tracy?
53:22.0	Student	I don't know. He just sits around all day.
53:23.0	Tester	He sits around. What do you do all day?
53:24.0	Student	Sit around and watch television, heh.
53:25.0	Tester	You don't=
53:26.0	Student	=and go to the coin shop.
	. . . . .	
53:49.0	Tester	What's the next most valuable coin that
53:49.1		you have?
53:50.0	Student	I don't know. (:01) An Indian head penny.
53:51.0	Tester	How much is that worth? (:02)
53:52.0	Student	Two dollars.
53:53.0	Tester	Two dollars/
53:54.0	Student	It's old. It's like- it's an eighteen seventy.
53:55.0	Tester	Oh my. That was even before I was born.
53:56.0	Student	It's an old.
53:57.0	Tester	If it was um [cough] if it was made in
53:57.1		eighteen seventy, now old is it?
53:58.0	Student	I don't know.

15. This is an actual quote from a school psychologist taken from an interview about a testing session.

16. The pronoun 'he' (his) is used when referring to students because 75% of the children tested in our study were boys.

17. In the "Sequence #" column, the numbers appearing before the colon refer to the testing session transcript number; the number after the colon is the line number.

53:59.0	Tester	Come on.
53:60.0	Student	I don't know.
53:61.0	Tester	Think. (:02) If it was made in eighteen seventy/
53:62.0	Student	Then it would be one hundred years old.
53:63.0	Tester	Just a hundred/
53:64.0	Student	Hundred and (:02) seventy.
53:65.0	Tester	Let's figure. Go on over here to my magic
53:65.1		board (points). Take the yellow- I mean
53:65.2		take the red magic marker, take the lid
53:65.3		off. Go over there and write on it. I want
53:65.4		you to figure that out. If that penny was
53:65.5		made in eighteen seventy nine, how old is
53:65.6		that nickel?
53:66.0	Student	Penny.
53:67.0	Tester	Oh penny, excuse me.
		. . . . .
32:18.0	Student	Tomorrow's my birthday.
		. . . . .
32:23.0	Tester	How old will you be?
32:24.0	Student	Seven.
32:25.0	Tester	Seven. Ooon. You're getting to be a big
32:25.1		kid. Do you have brothers and sisters?
32:26.0	Student	Only one brother.
32:27.0	Tester	One brother. How old is he?
32:28.0	Student	Three.
32:29.0	Tester	Three. So is he <u>older</u> or younger than you?
32:30.0	Student	Younger.
32.31.0	Tester	How much younger? (:05) If he's three
32:31.1		years old/
32:32.0	Student	And I'm seven.
		(:09)
32:33.0	Tester	If you're- he's three years old and you're
32:33.1		seven, how much younger is he than you?
32:33.2		Can you figure that one out?
		(:06)
32:34.0	Student	About three years each.

From these examples, we can see that the tester was seeking to guage at what level the student could compute simple math problems.[18] Unlike the formal on-task question-answer sequences discussed below, these informal elicita-

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18. In the first example, the student answered the question correctly 14 turns later (line 53:81.0). The entire sequence, beginning with line 49.0 took 2 minutes.

tions were extracted from the child's own life experiences. During these times when the student is initiating or directing the talk, he is more spontaneous and talks in longer and more complex utterances. For example:

Sequence #	Speaker	Transcript
53:89.0	Tester	What time did you get up?
53:90.0	Student	Eight fifteen.
53:91.0	Tester	Eight fifteen. That's a good time.
53:92.0	Student	Well since I'm on vacation I can
53:92.1		sleep as late as I want.
53:93.0	Tester	How late do you like to sleep?
53:94.0	Student	Sometimes til nine thirty.
		(:03)
53:95.0	Tester	My goodness.
53:96.0	Student	I stay up until one o'clock in the
53:96.1		morning.
53:97.0	Tester	What do you do until one o'clock?
53:98.0	Student	Watch television all day.
53:99.0	Tester	Don't you get zonked out?
53:100.0	Student	No heh well last night I did. That's
53:100.1		when I watched just the news.

Evaluating Evaluations

Evaluative remarks occur more frequently during formal test sequences than during informal openings and closings. Evaluations seem to be patterned on two things: (1) they usually index the first few question-answer pairs of each new test sequence to let the student know that (s)he had understood the question as intended and was providing the appropriate answer. For example:

Sequence	Speaker	Transcript
5.4	Tester	The first thing we're going to do is I
5.5		want you to tell me how a wheel and a
5.6		ball are alike. How are they alike or
5.7		how are they the same?
6.0	Preston	They're both round.
7.0	Tester	Very good, Preston. [writes] They're both
7.1		round. That's excellent. How are a
7.2		candle and a lamp alike?

8.0 Preston They both can light up.

9.0 Tester [writes] You're doing a good job.

And, (2) they are also guided by the tester's personal impression of the child. If the tester felt the student appeared unusually insecure, she would offer more positive evaluations throughout the testing session. According to standardized testing procedures, testers are not permitted to give dogmatic evaluations in reference to particular test items (e.g., "You did that one perfectly."), but rather are encouraged to yield more neutral and generalized evaluations (e.g., "You're doing a fine job.").

However, the school psychologist commonly mixed positive evaluations that referred to a specific task and those of a more general nature. The following excerpt from a transcript illustrates this point.

Sequence #	Speaker	Transcript
37:441.3	Tester	Make yours look just like that one.
37:441.4		That is a super job, Tracy.
37:442.0	Student	[draws]
37:443.0	Tester	Wow, you're doing a fine job.
37:444.0	Student	[draws]
37:445.0	Tester	I'm really proud of you. Beautiful!
37:445.1		These are excellent, Tracy. You
37:445.2		did a good job on that.

The same rule does not apply to negative evaluations however. In the case of performance-related tasks (e.g., when using manipulatives), if the student does not respond correctly to the first pair of questions in a new task sequence, the tester might say, "That's not exactly right. Let's try it again." For example:

Sequence	Speaker	Transcript
625.0	Tester	Okay. Now these pictures are going to tell
625.1		a picture about a fight. [displays
625.2		set] I want you to put these in order so

625.3		they tell a story, Kitty.
626.0	Kitty	Okay. [arranges pictures] (:10)
627.0	Tester	Kay, you through/
628.0	Kitty	Umhmm=
629.0 629.1 629.2 629.3 629.4 629.5	Tester	=Always make sure that I-I know that you're through, so I'll know to stop. [collects set] That wasn't quite right. Now. [displays set] Here are the pictures in order again. Now this picture should come first.

While with verbal-related tasks she might simply say, "That's a good try" and then provide the student with the correct answer.

Questioning Strategies

According to the normative theory of psychological and educational testing, a session should proceed in a metronomic sequence of questions and answers, questions asked by the tester, answers provided by the examinee (student). Figure 2.4 above reflects the oftentimes complicated nature of asking a question (Rotn, 1974, 1980). Instructions and questions on the part of the tester often result in students asking questions of clarification (see Format III in Figure 2.4):

Sequence	Speaker	Transcript	Code
26:173.1 26:173.2	Tester	Well, what's another uh, sometning else?	Q
26:174.1 26:174.2 26:174.3	Student	((Something else)) What are you taking about? This-you're mixing me up.	A:RC
26:175.1 26:175.2 26:175.3 26:175.4 26:175.5 26:175.6 26:175.7	Tester	Well, what is the capital of Greece? Well, let me see if I can help you a little more on that [she looks in manual which is on the table] Hold on ( ) [Tester claps hands to- gether after putting manual back on table] Do you know?	QR
26:176.0	Student	No.	A
26:177.0	Tester	Okay. [scores]	E

Because of the standardized stimulus presentation assumption of the formal test, the tester has to be careful not to add to the ideas expressed in the "standard" directions. It is imperative, according to the testing manual, that the examiner give directions exactly as provided. While it is sometimes permissible for testers to give cues and directions, the exact circumstances in which the cues and hints are to be given are not always worked out in detail. This is especially a problem in individual testing, where questions are given orally. On a mental-test item where the child is supposed to receive only one trial, his answer may show that he didn't understand the question. Where the test directions permit only one trial and the tester repeats the question or cues the student with additional information "since the child would certainly have answered correctly if he had understood what was wanted," it is considered a Type-1 Error (E-1). [19] For example:

Sequence	Speaker	Transcript	Code
35: 9.0	Tester	How are a shirt and a hat alike?	Q
35:10.0	Student	They're both worn.	A(1)
35:11.0	Tester	Both worn. What do you mean	Q:RC
35:11.1		they're both worn?	
35:12.0	Student	Well they both have some- the hat	A:(0)
35:12.1		got some a little bit of fluff and	
35:12.2		the shirt has all the yarn.	
35:13.0	Tester	What do you do with a shirt and	Q:RC
35:13.1		a hat?	
35:14.0	Student	You put em on.	A(1)

This test item is worth one point and the student scores that point with his first response, "They're both worn." The tester deviates from standard practice when she asks the student for clarification of his answer and consequently he obtains a score of zero with his second attempt. A direct cue is

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19. This is an actual quote from the school psychologist who administered this test.

embedded in the tester's second request for clarification, "What do you do with a shirt and a hat?", to which the student responds correctly, retrieving his original score of one point.

In the above example, the student simply retrieved his rightful point instead of gaining an extra point, which frequently occurred when a tester cued a student instead of proceeding to the next question. Preliminary analysis shows that overall scores were increased on the average 25% as a result of these modifications of standard procedure. [20] In the following example, for instance, the student's score is boosted an extra point due to an incongruous cue.

Sequence #	Speaker	Transcript	Code
42:198.0	Tester	What's the thing to do if a boy	Q
42:198.1		much smaller than yourself starts	
42:198.2		to fight with you?	
42:199.0	Student	I would say please don't fight	A(1)
42:199.1		with me.	
		(:02)	
42:200.0	Tester	Would you fight?	Q:RC
42:201.0	Student	No. I would just walk away.	A(2)

The student offers a one-point answer ("I would say please don't fight with me.") as his first response. The student's answer is a correct one; it gained him a point and did not call for any clarification on the part of the psychologist. Even had a cue been permitted, the psychologist would have only been allowed to say: "Explain what you mean" or "Tell me more about it." Instead, she elicits from the student a very specific response augmenting his score with a second point.

---

20. Preston's overall verbal score on the WISC-R was increased 33.2% as a result of incongruous cues.

Although occurring less often, occasionally a student lost a point as a result of an intervening cue.

Sequence #	Speaker	Transcript	Code
35:289.0	Tester	Tell me what the alphabet is.	Q
35:290.0	Student	Say it	A(0)
35:291.0	Tester	Remember now, I just popped in	Q:RC
35:291.1		from outer space and I don't know	
35:291.2		what an alphabet is. You got to	
35:291.3		tell me.	
35:292.0	Student	You can make a name out of it.	A(2)
35:293.0	Tester	Okay, you can make a name out it.	Q:RC
35:293.1		Okay, tell me more about the al-	
35:293.2		phabet. What do you mean you can	
35:293.3		make a name out of it?	
35:294.0	Student	Like you can make anybody's name.	A(2)
35:294.1		You can make anything.	
35:295.0	Tester	Could I make a table out of it?	Q:RC
35:296.0	Student	No, you can make a word of table.	A(2)
35:297.0	Tester	I can make a word?	Q:RC
35:298.0	Student	Yeah.	A(2)
35:299.0	Tester	I can make the word table?	Q:RC
35:300.0	Student	Yes.	A(2)
35:301.0	Tester	Okay, Preston. I can make a word	Q:RC
35:301.1		out of it. Tell me a little more	
35:301.2		about the alphabet. See I'm still	
35:301.3		not sure. I know I can make a	
35:301.4		word out of the alphabet but I	
35:301.5		don't know what it is.	
35:302.0	Student	It's numbers.	A(0)
35:303.0	Tester	It's numbers/	Q:RC
35:304.0	Student	Yes.	A(0)
35:305.0	Tester	You mean like one, two, three,	Q:RC
35:305.1		four, five, six, seven, eight,	
35:305.2		nine, ten?	
35:306.0	Student	No. It's like a, b, c, d, e, f, g.	A(1)

This transcript extract is long enough (though not as long as some others) to show the oftentimes surprising amount of interaction and "social work" that goes on between the initial asking of a question and the child's final answer (Roth, 1974). In this case, the student achieves two points with his answer, "You can make a name out of it" (line 35:292.0). He manages to keep his two points throughout all the psychologist's inappropriate queries, up

until he reports that the alphabet is "numbers." He retrieves one of his two points when he lists some of the letters in the alphabet in his final response (line 35:306.0).

Standard testing procedures acknowledge the need for requests for clarification of student responses. The WISC-R manual instructs testers as follows:

> If a child's response to a Verbal item is ambiguous or incomplete, the examiner should ask him to clarify his answer. The only probes permitted are the statements "Tell me more about it," "Explain what you mean," or similar neutral remarks. (WISC-R manual, p. 6)
>
> Many of the sample responses given in this manual include the notation (Q). When this notation appears, it indicates that the response preceding it - or a similar response - should be queried. (WISC-R manual, p. 6)

Just as we have found that testers improvise on testing procedures by providing hints and cues when they are not required, we have also found that examiners modify testing procedures by <u>not</u> giving cues when one is expected. An example of a "Type-2 Error" (E-2) follows:

Sequence #	Speaker	Transcript
36:215.0	Tester	All right. Why is it important for
36:215.1		cars to have license plates?
36:216.0	Student	Because if they didn't have one
36:216.1		they wouldn't know what state they're
36:216.2		from.
36:217.0	Tester	[scores response] (:20) What is a
36:217.1		criminal?

The assembly of this task sequence (Q-A) is especially interesting because the student's overall score could potentially change - for the worse. According to the manual, the student provided an answer that should have been cued by the tester since it isn't possible to know who the student was referring to when he said "<u>they</u> wouldn't know what state they're from." It's probably safe to assume that in "they're from," the "they" refers to the people who have the cars with license plates. However, in "they wouldn't know," it is as likely

the student meant the police or the Department of Motor Vehicles, as it is likely he was referring to the same people with the cars. If the student was in fact referring to the police or the DMV, then he would have received a point. Although the student provided an ambiguous answer, the psychologist did not ask for clarification and the student lost his chance to answer correctly.

Summary Remarks

The above examples and discussion have been provided in order to familarize the reader with the basic test assembly procedure for standardized tests. In the following pages, we present two case studies--Preston and Kitty--in more detail.

The Diagnosis of Students' Performance

The following two cases are reviewed to illustrate the process by which students' identities (as educationally handicapped" or as "normal student") are formed, starting in the classroom, and are sharpened by diagnosticians, and finally confirmed by placement committee members. This confirmation process has two components: (1) locating the disability and (2) searching for hidden disabilities.

Locating the Disability

Preston, a seven year old boy in first grade, was referred in September, 1978 for three reasons: (1) behavioral problems and poor peer relations, (2) reading at the pre-primer level, and (3) visual-motor dysfunction. The school psychologist administered an extensive battery of tests to Preston on February

8, 15, 22, and 27, 1979. Figure2.5 reveals that the tests administered to Preston were consistent with the teachers' referral reasons:

Referral Reasons	Classification of Tests
(1) Behavior	Personality Inventory
(2) Reading	Academic
(3) Visual-Motor	Visual Motor, Visual Perception

Figure 2.5: Teacher Referral Reasons and Test Classification

This consistency between referral reason and type of test administered was apparent for all the children tested in our study (see Table 2.1). Thus, we can say that psychological and educational testing was not the automatic administration of a prespecified battery of tests. The process of educational testing began with a judicious choice of instruments, suited to the referral history of the student.

--insert Table 2.1 here--

This tailoring of test administration to the perceived educational problems of the referred students resulted in a "test until find" approach to eductional testing, however. That is, school psychologists administered educational tests until they located the disabilities that teachers had indicated by their original referral. When the school psychologist "found" verification of the referral reasons, they stopped testing. They did not continue to administer educational tests in order to find discepancies in the original formulation of the student.

One of the school psychologists provided a rationale for this test until find" practice in a viewing session:

> When a child is referred to me, its hard to look at the whole picture because I'm constantly looking at why this child was referred to me, what's going on. Why is this teacher saying that

REFERRAL REASONS AND TEST PROFILE

STUDENT (AGE)	SHANE(9)	RODGER(9)	PRESTON(7)	TRACY(7)	ZANE(8)	KITTY(7)	ROBARD(9)
REFERRAL REASONS	SELFCON V-M DYS READ	V-P DYS EMO READ	BEHAV READ V-M DYS	EMO SELFCON READ	READ BEHAV	READ LANG ACAD	EMO READ COORD
TEST							
WRITE NAME		6	7	4	1	1	18
WRAT:Spelling	x	7	8	5	2	2	19
WRAT:Math	x	8	9		3	3	20
WRAT:Reading	x	9	10	7	4	4	21
WISC:Information	2		11		5	7	5
":Picture Completion	3		12		6	8	6
":Similarities	4		13		7	9	7/13
":Picture Arrangement	5		14		8	10	8
":Arithmetic	6		15		9	11	9
":Block Design			16/20		10	12	10
":Vocabulary			18		11	13	14
":Object Assembly			21		12	14	15
":Comprehension			23		13	16	16
":Coding			22	6	14	15	
":Digit Span	10		25		16	6/17	12/17
":Mazes			24		15		
BENDER-GESTALT	x		6/19		17	5	11
MOTOR-FREE VISUAL PERCEPTION TEST		4	1	3			4
MOTOR INTEGRATION			2	2			1
DRAW A PERSON		1	3/5	x		18	2
DRAW YOUR FAMILY	7	2		x		19	3
3 WISHES	1	3	4				
CAT	8						
BERKELEY	9						
NAME WORDS				1			
VISUAL-AURAL DEVELOPMENT	x		17				
INDIANA/BASIC SKILLS			x				
BEERY		5					
TOTAL # OF TESTS	15	9	26	9	17	19	21
CLASSIFICATION OF TESTS IN ORDER ADMINISTERED	EMO INT EMO ACAD PERS V-M	EMO V-P V-M ACAD PERS	V-M EMO ACAD INT V-P PERS	ACAD V-P ACAD V-M EMO PERS	ACAD INT V-M EMO	ACAD INT V-M INT EMO PERS	V-P EMO V-M INT ACAD PERS

KEY/REFERRAL REASONS: SELFCON=SELF-CONCEPT;V-M DYS=VISUAL-MOTOR DYSFUNCTION;READ=READING; V-P DYS=VISUAL PERCEPTION DYSFUNCTION;EMO=EMOTIONAL PROBLEMS;BEHAV=BEHAVIORAL;LANG=LANGUAGE ARTS;COORD=COORDINATION DIFFICULTIES

KEY/CLASSIFICATION OF TESTS: EMO=EMOTIONAL;INT=INTELLIGENCE;ACAD=ACADEMIC;PERS=PERSONALITY INVENTORY;V-M=VISUAL MOTOR;V-P=VISUAL PERCEPTION

KEY/TEST: x=test administered though not certain in which sequence;3/5(number/number)=this test was administered twice,i.e., it was the 3rd and the 5th test

TABLE 2.1

> the child is not working, or this child is not doing this, or not doing that. So, I'm always looking for what it is that's going wrong, or what is this child doing that not's right, rather than what's this child doing that's right.
>
> (EDM Tester Interview #32, page 18)

Search for Hidden Disabilities

If the initial set of tests did not uncover the disability suggested by the classroom teacher, then the school psychologists initiated a search procedure to find this "hidden" disability. This was the case with "Kitty," the second illustrative case we are reviewing here. Kitty, a seven year old girl in second grade, was referred by her classroom teacher because she was performing below grade level primarily in reading and language arts. At the time of the referral the classroom teacher was considering four placement options for Kitty: (1) retain her in 2nd grade for the following school year, (2) place her in a learning disability group (LDG), a part-time pull-out special education program, (3) have her work with the school's reading specialist on a part-time basis, and (4) place her in the multiply handicapped (MH) special education classroom.

The classroom teacher felt the reason for Kitty's reading problem was a result of a visual dysfunction - a "lazy eye" which required her to wear an eye patch for lengthy periods of time impairing her sight. During a viewing session of the classroom videotape, the teacher reported:

> Basically, in first grade she couldn't see very well and therefore she didn't learn to read. I always thought that she had the capability to read but wasn't doing it, you know. And I thought maybe there was some sort of organic problem involved, some sort of maybe neurological problem. She seems to be a pretty nice girl who has you know definite strengths in math and yet when it came to reading she just couldn't do it.
>
> (EDM Teacher Interview #54, page 40)

While viewing the videotape of the classroom segment, the teacher asked us to stop the tape at a point when Kitty was holding her book very close to her face, "as if trying to see it better" (EDM#54, p.42). The teacher interpreted Kitty's action to mean the following:

> Maybe that was just her way of really trying hard. For all I know she could see it well from back here but um the way I interpreted her bringing the book closer or her bending over the table was that see how hard I'm trying, I'm really trying to do a good job. Unconsciously she was trying to display her trying, to impress me.
> (EDM Teacher Interview #54, p. 42)

Even though the teacher believed Kitty's "lazy eye" impaired her sight, making it difficult to read at times, he felt there was "something else" responsible for her low reading performance in the classroom and hence referred her for educational and psychological tsting with the hopes that she would qualify for special education.

The school psychologist administered a complete battery of tests to Kitty (totalling 19). During the first testing session Kitty did not wear her glasses. The psychologist readministered several of the same tests during the second and third testing sessions since at these times Kitty had her new glasses. After exhausting the academic (Wide Range Achievement Tests:WRAT), motor-visual (Bender-Gestalt), and intelligence (WISC-R) tests, the tester did not find any evidence of a learning disability. That is, Kitty performed at grade level or better in all of the standardized tests administered to her. Therefore, the psychologist proceeded with a personality inventory in order to uncover any evidence of the teacher's referral reasons.

However, after 19 tests were administered the tester could not locate Kitty's learning disability. Only then did the psychologist recommend that Kitty remain in her regular education classroom and not be placed in a special education program. It seems that only after the entire inventory of tests is exhausted does the diagnostician give up the search for the hidden disability.

This practice had the (perhaps unintended) consequence of both confirming the teacher's original perception of referred students, and substituting institutionally refined designations ("learning disabled") for teachers' often vague descriptions ("she needs help").

The Etiology of Diagnoses - A Forensic Analysis

A third line of investigation that we pursued was an examination of the role that assessment practices play in the diagnosis and identification of students as handicapped and the placement of referred students into various educational categories, whether special or regular. We looked at the textual records (e.g., teacher referral reports, test scores, and psychologists' reports) produced about the child in different contexts to see how such a record stands in relationship to the interaction between the teacher and student in the classroom and the tester and student in the testing session.

In order to determine how diagnosticians come to conclusions about students' performances and then make recommendations for educational placements, we have done a "forensic analysis" of the diagnostic process. This is not merely an argumentative exercise, as the term might perfunctorily imply. Instead, it is an examination of the relationship between "clinical facts," those reported in the psychologist's written accounts, which are entered in

the student's records and presented to decision making groups, and observable behavior in controlled testing activities and the more natural classroom situation.

Just as the coroner is presented with a corpus, a body of facts, and must work retrospectively in order to construct the cause of the event, we have available to us a body of facts, a corpus of information about the psychologist's interpretation of the student's behavior in the form of the psychologist's "write-ups" of psychological settings. We have also worked retrospectively, tracing back from the textual record of assessment situations through the line of reasoning that led to the diagnostic conclusions presented.

The Psychologist's Report and Its Diagnostic Implications

As researchers of schools, we are all familiar with the caricature of the itinerant psychologist, WISC kit in hand, who categorizes a child as LD or EH or MR after a 50-minute test, and recommends special placement. We also know this testing process isn't so simplistic. The psychologist is faced with a practical, albeit complex, task in the course of her "case" work. She has spent countless hours in one-to-one testing situations, in discussions with classroom teachers, sometimes observing in classrooms, and talking with other people, including parents, knowledgeable about the child in question. She must reduce the myriad details from this mound of information to a brief, coherent report. It is somewhat paradoxical that the school psychologist, who sees the referral child the least in the ongoing situations of the referral process, is likely to have the most influence on placement decisions in special education programs. The psychologist's report represents a process of

analysis, synthesis, and integration of the material gathered by the examiner. The IQ obtained by tne child, as computed by tne tester, is the anchor point for the development of the report and the basis for the psychologist's recommendation to the decision making committee. The scores themselves, rather than the diagnostic profile interpretations explaining the scores, formed the basis for making recommendations for which educational placement would be best for the referred cnild. The psychologist's report served as a medium through which findings were described and impressions conveyed. In addition to the formal written report, the psychologist made her report to the decision making committee (E&P) verbally, and usually to tne child's parents.

The question that concerns us in tnis phase of the project is simply: How does tne tester present her report? The psychologist is constrained by the limits of human information processing capacity and organizational constraints on time and space. Therefore, what kinds of information does the tester include in her report, and by inference, what does she leave out? And, what is the basis for decisions to include and exclude information? Does the information tnat is reported to the decision making committee come from the tester's encounters with the student during "official," i.e., "formal," aspects of the testing situation? Or, does it come from the informal warm-up phase and informal off-task time, or from previous discussions with teachers?

Formalizing Informal Tests

Tne school psychologists often seek validation of the referral behavior from some indirect and circuitous sources. The school psychologist administered tne Bender-Gestalt test to Preston under tne heading of a visual-motor test (see Figure 2.6). However, the psychologist also used aspects of this

test as an "emotional indicator." The Bender-Gestalt is a well-known figure-copying test, consisting of nine designs. The child is asked to copy each figure so as to make it as much like the model as possible. The instructions given to the child are usually: "I've got some designs here that I want you to copy. I want you to make your designs look just like the ones on the card." Below are the nine figures used in the Bender-Gestalt test:

--insert Figure 2.6 here--

On one (surface) level, this test is designed to measure visual perception and visual-motor expression skills. The school psychologist used this same test as part of her personality inventory. She explained the rationale for using this test in this way as follows:

> If a child uses all of his sheets of paper, that's considered expansion, and that's an emotional indicator of acting out and poor control. In Preston's case, he finished very quickly and that's an indicator of impulsivity. And there was a lot of real heavy and dark lines which in Preston's case may be associated with some aggression.
>
> (EDM Tester Interview #32, p.22)

The psychologist also administered an "informal" test -- "The Three Wishes" -- to Preston as part of her Personality Inventory. Preston was asked to tell the tester what he would wish for if he had three wishes. Preston said he wished he "could fly," that "no one would ever bother me," and he "could stay under water so (he) could see all the fish and stuff like that." Although the tester administered this "informal" test "just to see if he was fantasizing," (EDM#32, p.14) she interpreted and integrated Preston's response into her formal written evaluation in the following way:

> What I see is Preston having difficulty with interpersonal relationships, and he hasn't found a way to deal with those effectively. All he can think of is to get away and to escape.
>
> (EDM Tester Interview #32, p. 14)

BENDER-GESTALT

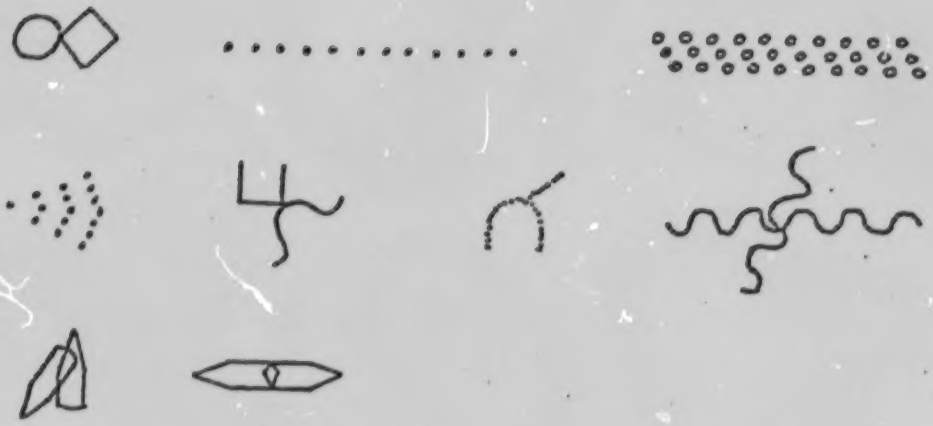

Figure 2.6

That is, Preston was assessed by the psychologist as being "anxious," "fidgety," and having "poor peer relations." We have reviewed videotapes of all of Preston's testing sessions and transcripts of viewing sessions with the tester to determine what information led the psychologist to reach that conclusion. It seems that this conclusion was reached based on the student's performance during informal, off-task times, and informal tests like "The Three Wishes," which comprised only about 10% of the sessions and not from the formal (standardized) tests administered to the student during testing sessions.

We discovered that the school psychologist's diagnostic contribution was limited, too often providing mere confirmaton of, rather than insight into, the problem for which the child was referred. During a viewing session of the videotapes filmed during the testing sessions with Preston, the psychologist disclosed:

> Yeah, but even looking at Preston now, he's you know, I see him differently than I remember him in my mind. One of the things I remember is him being a lot more active. And I think I'm remembering through what the classroom teacher was reporting. In terms of his classroom behavior and playground behavior, she reported that as being aggressive and him having a real short attention span and being real active in the classroom. It could be that my reflection of, my perception of Preston was more a reflection, a projection of what the teacher reported. The teacher really described him as a real problem. I mean she really described him as a rotten kid.

Conclusions

Students are perceived as special education candidates when they are first referred by classroom teachers. Although there are no prior direct interactions between referred students and the psychologist, students do not enter the testing room with an empty slate. Their referral identity (status) has already begun to be formed since by this time they have been identified as observably "different" on some occasion(s). The available interview and videotape data suggests that the diagnostician reinforces the referring agent's initial suppositions about the child by recognizing apparent "indicators" of such handicapped behavior in earlier classroom behavior reported by the teacher. The aftermath of such rereading of an individual is basic to the way in which the diagnostic process "creates" handicapped students and hence, handicapped student careers.

Embedded in the referral process then, is a systematic confirmation process, one in which students' identities are patterned and shaped as students move from regular classrooms to testing rooms, and finally to meeting rooms. The initial referral affords the student with a circumstantiate handicapped status, thereby placing the burden of proof on the student.

It is in the diagnostic phase of the referral process that referred students are literally put to the test. To reiterate what a school psychologist said: "why has this child been referred to testing?" Our analysis has shown that psychologists pattern the administration of tests to the initial referral reasons, and continue to test until they "find" the child's disability. Although "right" answers provided by the referral student are appropriately scored and noted in the psychologist's written report, they go unmentioned in

the psychologist's oral presentation to the decision making committee.

Diagnosticians' reports have an undeniable quality about them; they reflect a construction of social realities, providing statistical generalities (e. g., "He scored 5.2 on the Bender Gestalt and 5.7 on the Berry"), rather than elaborate descriptions of the testing process. Although psychological and educational testing is a method of discovery, tests are not so infallible that they are mechanical devices that can render decisions automatically. However, it is the numbers (scores) rather than the psychologist's discovery process that anchor's the psychologist's report. And, it is the psychologist's report that weighs heaviest on the decision to label a student "educationally handicapped,"and then place him in a special education program.

When a child in public school is officially labeled "educationally handicapped" or "learning disabled," the label is treated as a "social fact" about the child. The label becomes an object with a fixed meaning for the institution, although a social product of its own practices. In this state the label can collapse into a signification, a category, or a metaphor. The deliverers of stigmatizing labels do not acknowledge that these paradigmatic models stage a distorted "reality" for its participants and can cast its members to be performers of misimpressioned activities.

SECTION 3. DECISION MAKING IN PLACEMENT MEETINGS

The meeting of the Eligibility and Placement Committee ("E&P" or simply "placement" committee) is the culmination of the decision making process affecting students' careers. It is in this committee meeting that the final decision to place a student in a special education program or return that stu-

dent to a regular classroom is made (for the full range of these possibilities, see Figure 8.1).

The "Eligibility and Placement" (E&P) committee is a group convened at the district level. Its members include the school administrator in charge of special education, the school nurse, the district psychologist, the referring teacher, and a special education teacher. The parents of the student referred are also required by law (PL 94-142) to participate in committee meetings.

The principle purpose of E&P Committee meetings is to determine the most appropriate educational placement for the student referred to the committee. This committee had a number of placement options: it could recommend that the student be retained in the regular classroom, be placed in a number of special education programs, receive counseling, or be placed in a program outside the school district at district expense. Special education programs within the district can be grouped into "whole day" or "self contained" programs and "pullout" programs. Self contained programs (see #9, 11, and 12 in Figure 1) are considered more severe placements, because the student is removed from the regular classroom on a permanent basis. In pullout programs, such as the one for "learning disabled" students, the student spends part of the school day in the regular classroom, and part of the day in a special classroom.

We are fortunate to have videotape of and access to documents used in and produced during the placement meetings for analysis. These materials and the information we have about the placement process gained by observation in the district afford us an unusual opportunity to examine educational decision making in situ. Our analysis of decision making in placement meetings is aimed at describing what decisions are reached by these committees. And, we want to

determine how such decisions are reached. This latter point may require some clarification. We have no doubt that there is a decision reached in these committee meetings in the sense that there is an "outcome," i. e., a placement of a student in some educational program. While the product of the process is clear, what is not so clear is a way to describe the process by which the decision is reached.

With these considerations in mind, we want to determine the relevance that existing notions of decision making have to the activities we observe in placement committee meetings. We want to see whether prevailing theoretical constructs provide a useful framework within which decision making in committee meetings can be analyzed. We want to see in what ways decision making in placement meetings is similar to or differs from decision making that has been observed in other contexts, both naturally occurring and experimental.

Consideration of these topics has lead us to review the literature on decision making, both the individual and group variety.

The Rational Model of Decision Making

A prevailing view in the social sciences literature, and within the text of the federal law that governs the education of all handicapped students (PL 94-142), is that social organizations such as school systems, and actors within them behave according to rational rules or criteria in reaching decisions. The origins of this "rational model" (Allison, 1971; Benson, 1977) are in the Hobbsean conception of actors: utilitarian and value maximizing. It has been restated by Weber (1947: 115-118: 1949: 52-53), Schelling (1950), Simon (1949), Schutz (1943: 142-143), and Garfinkel (1967), among others.

Parsons' (1932) delineation of the theory of action in terms of the means-end schema particularly influenced the development of this model.

The primary elements of models of rational action are (1) goals and objectives, (2) alternatives, (3) consequences, and (4) choice (Allison, 1971: 29-31). The goals and objectives are the "payoffs" or ends that the actor wishes to reach. The actor must choose among a set of alternatives displayed before him in a particular situation. To each alternative is attached a set of consequences, or outcomes of choice that will insure if that particular goal or objective is chosen. "Choice" consists, simply, of selecting that alternative whose consequences rank highest in the decision maker's payoff function.

As stated, this characterization is little more than an elaboration of the pervasive everyday assumption that people's actions are goal directed, or intentional. To conceive of action as "rational," is to do more than treat choices as merely calculated, purposive, or strategic. What rationality adds to the concept of purpose is consistency: consistency among goals and objectives and their relation to a particular actor; consistency in the application of principles to select optimal behavior (Allison, 1971: 28-29). The element of consistency, which gives action its decidedly rational character, is handled in one of two ways in prevailing theories: as "comprehensive" rationality or as "bounded" rationality.

Comprehensive Rationality

According to Allison (1971), most theories of individual and organizational choice employ a concept of "comprehensive rationality:" individuals and organizations choose the best alternative, taking account of consequences, their probabilities, and utilities. Such choices require: "(1) the generation of all possible alternatives, (2) assessment of the probabilities of each, (3) and evaluation of each set of consequences for all relevant goals" (Allison, 1971: 71). In this formulation, "the alternatives" mean all alternatives; the consequences mean all the consequences that will result from the choice of any one alternative. As Watkins (1970: 206) says, such "a decision scheme should consist of a complete specification of the possible outcomes, a complete preference map, or a complete allocation of payoff values to the outcomes, and (where appropriate) a comprehensive analysis for dealing with risks and uncertainties." (cf. Schutz, 1943: 142-143; Janis and Mann, 1978: 11).

There is an "optimizing" (Simon, 1949; March and Olsen, 1976) principle inherent in the rational model. It has the goal of making the best decisions by maximizing the positive consequences and minimizing the negative consequences. The description by Elstein et al (1978: 25) of Benjamin Franklin's method for making systematic use of available information before rendering a practical judgment is a prime example of this optimizing principle. Franklin apparantly would list all the factors supporting or militating against a course of action, sum all the values making situations, just what the variables are that need to be weighed, or whether people employ such an algebra in actual practice.

Rational Action and Formal Operational Thinking. There is a remarkable similarity between descriptions of comprehensive rationality action within

economics and sociology and descriptions of formal operational thinking within developmental psychology. Both treat the actor as "scientific reasoners."

Piaget depicts the development of thinking as progressing through a fixed sequence of stages, from sensori-motor, through pre-operational, concrete operational, to formal operational thinking (Inhelder and Piaget, 1958). According to Piaget, formal operational thinking is the pinnacle of the developmental sequence. While the concrete operational child reasons from one element to another, with no overall structure for representing relationships, formal operational thinkers are able to coordinate the functioning of parts into an integrated structure. The coordination involves the ability to construct the combinatorial of all possibilities, to manipulate one variable at a time while holding everything else constant, and to deal with possibilities that are not actually observed. That is, formal operational thinking is assumed to entail a cognitive structure that is fully describable in terms of the logic of the propositional calculus (Wason, 1977).

In short, the reasoning of the actor in the rational model of formal organizations and the reasoning of the problem solver in the Piagetian model of cognitive development have analagous characteristics. Both the rational bureaucrat in social organizations and the formal operational thinker test hypotheses by gathering all the relevant information, consider all possibilities in their entirety, and vary one factor at a time while holding all other variables constant. That is, they employ "scientifically rational" forms of reasoning, solving problems in accordance with the canons of formal propositional logic.

Comprenensive Rationality as a Normative Ideal. Some analysts employ the comprehensive model essentially as a norm. Actual events are explained (and criticized) as approximations to the choices by the comprehensive model. The use of the comprehensive model as a normative ideal invites invidious distinction between the decision making that transpires in naturally-occurring situations and so-called "rational" models of decision making (Parsons, 1932) or "formal operational thinking" (Innelder and Piaget, 1958) such that everyday decision makers are said to employ "imperfect rationality" (Watkins, 1970), or, are characterized as "reluctant decision makers" (Janis and Mann, 1978).

Bounded Rationality

While comprehensive rationality with its optimizing principle seems to epitomize fair judgment, it is often not clear whether the conditions necessary for making comprehensive decisions can be met in everyday and institutional decision making situations. A number of theorists (e.g., Simon, 1949; Watkins, 1970) have restricted their claims concerning optimal choice by focusing on the limits of human information processing capacity in comparison with the complexities of problems that decision makers face. People do not make decisions by maximizing the positive consequences and minimizing the negative consequences because:

> determining all the potentially favorable and unfavorable aspects of all feasible courses of action would require the decision maker to process so much information that impossible demands would be placed on his resources and mental capacities (Janis and Mann, 1978: 22).

While attempting to acquire the degree of knowledge needed to anticipate alternative outcomes, the decision maker is likely to be overwhelmed with information.

> So many relevant variables may have to be taken into account that tney can not all be kept in mind at the same time. The number of crucially relevant categories needed for rational decision making usually exceeds the capacity for processing in immediate memory. Handicapped by the shortcomings of the human mind, the decision maker's attention, asserts Simon, shifts from one value to another with consequent shifts in preference (Janis and Mann, 1978: 22).

Shweder (1977) pushes this point even further. People's performance on formal operational tasks, leads Shweder to conclude that the reasoning of well educated Western adults is no different than that used by Zande oracle readers and other so called primitive thinkers. Both ignore correlation-relevant information. This "magical thinking" is an expression of a universal cognitive processing limitation of the human mind, according to Shweder.

In sum, tne social, ecological, and psychological limits of man's capacity as alternative generator, information processor, and problem solver can strain the decision making process such that conformance with the comprehensive or scientific ideal is difficult, it not impossible. The gap between the ideal model and actual practice is a matter of cognitive limitation, a failure, really, of the individual decision maker. Decision makers make mistakes and errors because they can not keep enough information in their heads, or because they are inundated with too much information. Because of these bounds, intendedly rational action requires simplified models that extract the main features of a problem without capturing all its complexity.

Tne Root Metaphor of Rational Action

As is the case with other concepts that structure our everyday activities, there is an underlying or "root" metaphor (Pepper, 1944; cf. Lakoff and Jonnson, 1980) in rational models of decision making in both comprehensive and

bounded forms. The metaphor is composed of a set of terms, and the terms gain their meaning from their participation in a conceptual web:

(1) the rational model implies that events have causes;

(2) "decisions" presuppose a "decider" and a choice among alternatives with reference to some goal;

(3) actions are taken by purposeful agents;

(4) what is to be explained is the action, i.e., behavior that reflects purpose or intention;

(5) an action is explained by reference to the aims of a unitary actor and his goals and objectives (Allison, 1971).

While the individual actor in a situation of choice such as chess or prisoner's dilemma is usually the unit of analysis, the rational model of action metaphor has been recapitulated at the organizational level. In such studies, the organization is equated with a person. As in everyday life, persons take actions which have causes; so, too, must organizations. An attempt is made to explain organizational events recounting the aims and calculations of organizations. Researchers studying organizational behavior see actions; they look for motives behind them.

Allison (1971) examined a number of analyses of organizational and governmental actions, e.g., the Cuban missile crisis, the origins of World War I, Pearl Harbor. He found that each analysis assumes that what must be explained is an action, i.e., a behavior that reflects purpose or intention: "the actor is a national government. The action chosen is a calculated solution to a strategic problem. Each explanation consists of showing what goal the organization was pursuing when it acted, and how the action was a reasonable choice, given the nation's objectives" (Allison, 1971: 13).

The concept of rationality is important in organizational studies, because it enables the theorist to structure problems of choice. If the theorist knows the ends of some decision maker, then he can predict what actions will be taken to achieve them. He does so by calculating the most reasonable way for the decision maker to achieve his goals and assumes that this will actually be taken, "because the decision maker is rational" (Allison, 1971: 50). The concept of rationality is also important because if a person acts rationally, his behavior can be fully explained "by reference to a unitary actor" (Allison, 1971: 36) and "in terms of the goals he is trying to achieve" (Allison, 1971: 30).

Comprehensive Rationality in Special Education Law

The federal law that governs special education (PL 94-142) is based on the "comprehensive" version of the rational model of decision making. The major purpose of this law is "to assure that all handicapped children have available to them a free appropriate public education which emphasizes special education and related services designated to meet those needs" (Sec. 601c).

The handicapped students' needs are to be met by developing an "individualized educational plan" (IEP). The IEP is developed by:

(1) documenting the student's current level of performance;

(2) stating the goals to be obtained by the end of the school year;

(3) stating the short term, intermediate steps leading to the annual goals;

(4) documenting the particular special education and related services which will be provided to the student (PL 94-142).

That is, the needs of the student are to be matched to characteristics of a special education program. The student's needs are the first, foremost, and primary basis upon which educational decision making concerning placement is to be made.

Describing the Decision Making Process

The purpose of this analysis is to describe the decision making process employed by E&P Committees. This effort is motivated by the belief that in order to understand decision making, the process as it unfolds in naturally occurring situations must be described.

The analysis which follows proceeds in four steps. First, the products or outcomes of the committee meeting are presented. Second, the circumstances that impinge upon the committee members in their deliberations are discussed. Third, the organizational practices that lead up to committee meetings are described. Finally, the organizational practices that occur routinely within meetings are described.

The Committee's Decisions

E&P committees considered 53 cases during the year of this study. The great majority of the students (74%) were placed into "pullout" programs (career paths #10 and 13), while 23% were placed into self contained classrooms (career paths # 9,11,12) by these committees. No students were placed in special education programs outside the district (career path #14).

The committee meetings that we observed in the district during the year of our study followed a regular pattern. The meeting was convened by either the district representative, or by the school psychologist in charge of the case. Then, each of the committee members who had information about the student being considered for placement made a report. Immediately after these reports, the student's placement was determined. The following exchanges are representative of this phase of the committee meetings:

EDM #33

92 Psy. does the uh, committee agree that the, uh learning disability placement is one that might benefit him?

93 Prin. I think we agree.

94 Psy. We're not considering then a special day class at all for him?

95 S.E.T. I wouldn't at this point//

96 Many No.

Psy=Psychologist; S.E.T.=Special Education Teacher; Prin.=Principal; DR=District Representative; Par=Parents

EDM#47

28 Psy. Okay, in light of all the data that we have, I think that the program we want to recommend is the learning disability group pullout program.

29 Mother Pullout=I don't understand that//

30 Psy. For Tracy. You know, that's the program we sort of talked about that day, where he would be pulled out of the classroom for specific work on the areas that he needs, that, you know, are identified today.

EDM#57

35 Psy. Okay. Now, okay, now then, let's, why don't we take a vote. Um, for the Learning Disabilities Group pull-out program. Um, is there anyone, anyone who does not agree? (3) Okay. I think that was unanimous. (soft laughter) All right. Then what we have to do

now is sign. But, um, before we sign I'd like to have un, Suzanna um, talk about the rights to private schooling and talk about your rights as parents.

36 DR I think you probably have these two forms but they talk about your rights as parents. I'm going to give you a copy anyway so, um, you are aware.

37 Psy I think you received it in the mail before.

38 DR Yeah. You probably did. I'd also like to inform you of your rights as parents to private schooling for Ricardo <u>if</u> the District should not have an appropriate program for the child. Uh, this is the law. However, under the same law, we feel that we <u>do</u> have a program for your child that would meet his needs. Okay? So I'm going to ask you to sign this form and you'll keep a copy and I'll sign the form too. And this is <u>just</u> only to inform you of your rights. Okay?

39 Parent(inaudible) (signing) (8-9 sec.)

This interactional activity finished the work of educational placement. We seek to understand this manner of reaching educational decisions. This point may require some clarification. There is no doubt that there are outcomes in the form of placements of students in some educational program. While the product of the process is clear, what is not so clear is a way to describe the process by which the products are produced.

One thing is certain. These exchanges do not have the features routinely associated with "rational" decision making and "formal" reasoning presented above. The combinatorial of all possible placements was not discussed at the time these decisions were reached. The entire range of goals and means to achieve them was not discussed. One variable was not considered at a time. Rather, the possibility of placement in one or two closely related programs was considered, e. g., an Educationally Handicapped classroom, or a Learning Disability program. And these possibilities were not debated as alternatives

being weighed equally in the balance. One was presented as the preferred option, and the other was presented as a secondary consideration.

These observations point to a gap between the rational model as conceived in the ideal, and the real decisions observed in actual practice. While we may agree that these committee members are not reasoning like the scientific ideal, or even like Ben Franklin, there is considerably less agreement about why this is so. We seek to avoid disparaging everyday decision making by comparing it to rational models and formal logic. Instead, we seek a description of institutional decision making in its own terms, one that is consistent with participants' practices. That is, this inquiry is recollective. It aims to re-collect what is known by participants in their practical activity, albeit tacitly known by them (Mehan, 1979:173-176; Heap, 1980). We especially do not want to impose schemas derived from experimental situations on everyday life situations, because the principles that organize experimental settings vary in important ways from the principles that organize everyday life situations.

> There is a danger . . . in applying the language developed for the psychology of the individual to describe the functioning of the social system. When we speak of organizational goals, organizational choice, organizational language, and decision making, we must restrict our reference to certain leaders and subgroups and not regard the organization as a person. If we do not we will oversimplify organizational behavior. . . . (Katz and Kahn, 1978: 480,481).

This interest turns our attention to the circumstances of decision making, both the organization of the immediate problem solving situation and the organizational features of the school system as a social institution. When we do so, we find (borrowing a phrase from Garfinkel) "good organizational reasons" for decision making in placement meetings to be structured in the way

that it is.

The Practical Circumstances of Institutional Decision Making.

As we examine the decision making work of these educators, we must be aware of the organizational circumstances confronting them. There are a number of economic, legal, and practical considerations that constrain placement decisions and the processes by which decisions are reached. The public law governing special education (PL 94-142) indicates that 12% of the school aged population will be served by special education programs. The compulsary thrust of this law provides an incentive to search for, identify, and place students into special education programs in order to meet mandated quotas.

The legal incentive to search for special education students is reinforced by financial incentives. School districts are provided funds from state and federal sources for each student in regular school classrooms, and a greater amount of money for students in special education classrooms. They receive more money for students in "pullout" special education programs, and still more for students in "whole day" and more severe placement programs on a sliding scale. This additional source of revenue also serves as an incentive to search for students to place in special education.

Just as there are incentives to locate and place students in special education programs in order to receive the maximum state and federal support, so, too, there are disincentives to find too many special students. Funds for special programs are not unlimited. A funding ceiling is reached when 12 students are placed in one EH classroom, 25 with on LD teacher, etc. No additional money is provided if more students than the quota are assigned to par-

ticular classrooms.

Organizational Arrangements Prior to Committee Meetings

These financial, fiscal, and practical circumstances constrain the educational decision making process throughout the referral system in general, and influence the placement decisions in committee meetings in particular. A number of institutional practices have developed in this district in response to these circumstances. Some of these practices (those which are the topic of this section of the final report), operate prior to final placement meetings. These practices include: pre-placement planning, reducing the range of alternatives, and making placements in terms of available programs. Another set of practices operate within the meeting itself. They are the topic of the following section.

Pre-placement Planning. We found that considerable pre-placement planning preceeded the formal placement meeting. The "re-appraisal meetings" identified in Figure 1 often served this purpose. They were occasions to prepare the paperwork needed in the placement meeting. The pre-planning saved considerable time during placement meetings which were attended by several highly paid professionals with busy schedules. The re-appraisal meetings were also viewed as an opportunity for the staff to reach a consensus before meeting with parents. The consensus could either be a gentle way of informing the parent of the child's problem, or it could be a defensive strategy for dealing with a parent aggressively seeking expensive service outside the district.

Reducing the Number of Alternatives. The potential range of placement options available to the placement committee is manifold (see Figure 1). Yet

the committee does not give evidence of considering this entire range of alternatives in their meeting. A much smaller range of closely related placement possibilities is considered. A number of organizational practices operate to reduce the number of alternatives considered by the committee in its final placement meeting. Like Goffman's (1961) and Garfinkel's (1967) "management practices," many of these practices operate before a formal meeting is convened.

Certain placement options, while logically possible, are, for all practical purposes not available to the decision makers during committee meetings. The option to place students in programs outside the district at district expense is one such option which is simply not available to the committee. That placement possibility was eliminated from consideration by administrative fiat long before placement committees met because of the inordinate expense involved in out of district placements. A separate program for mentally retarded students was another placement option not available to the committee as a consequence of prior administrative decisions. The district did not establish separate classrooms for these students. Instead, they were distributed to other programs, such as "Severe Language Handicapped (#11, Figure 1). Given these institutional arrangements, it is not surprising to find that the MR and the out of district placement options were not considered by the committee during the year of this study.

The number of students already assigned to special education programs eliminates other options from consideration prior to an eligibility and placement committee meeting. Programs that are "full," i. e., have reached the funding ceiling, are eliminated from consideration, while programs that have

not reached the legally mandated quota remain subject to consideration.

Vagaries in the school calendar also influenced the consideration of placement options. The district operated on a "year round schedule." Instead of conducting classes from September to June, and designating the summer months as vacation, a staggered schedule of classes and vacations was maintained. Because of this staggered schedule, regular and special education teachers who were to cooperate in the education of certain students often found themselves on incompatible track schedules. This incompatibility of schedules eliminated certain placement options from consideration by the committee.

A consequence of these legal, financial, and practical constraints is that the designation "handicapped student" is as much a function of the school calendar, the demographic chararacteristics of the student population, and other features of the social organization of the school, as it is a function of some inherent characteristics of the student.

Placement by Available Category. Once the list of logically possible placement choices has been reduced to a smaller number of actually possible choices by the host of practical circumstances constraining decision making, the committee decides on a placement for the student. The actions of the E&P committee members suggest that the final placement decisions are made in terms of a number of factors, including the educational programs that are available, the funds that are available, teacher's schedules, and legal requirements, and not solely in terms of the student's "disability." More specifically, the committee first determined which placement categories were available, and then chose a placement for the student. The committee did not first assess the

student, design a program and then search for an educational plan that matched that assessment in each and every detail.

This practice of making placements by available category contrasts sharply with the theory of decision making inherent in special education law and rational models of action. The construction of an individualized education plan (IEP) for students with special needs is envisioned in theory by some special educators, advocates (such as the Council for Exceptional Children) and parents as a sequential process in which the goals and objectives for the child's education are agreed upon, the services to be provided to the child are spelled out, educational criteria are specified, and a written plan is prepared, which is then signed by the parent. Thus, the law implies a certain temporal order for the conduct of the placement meetings:

1. the child's present level of performance would be determined by members of the committee who have information about the child;

2. goals and objectives would be written based on the discrepancy between the child's actual and expected levels of performance;

3. the parents' rights to educational services, and the range of available services would be explained;

4. the committee would reach a decision about the appropriate placement for the child based on those goals and objectives.

This sequence of events was not followed in practice. The E&P meetings that we observed did not have that temporal order. The actual order of events was the following:

1. the presentation of information by committee members (same as #1 above);

2. tne placement decision (#4) above;

3. the explanation of parents' rights (#3) above:

4. the writing of goals and objectives (#2) above.

The variation between the expected and the actual order of events in placement meetings demonstrates that the goals and objectives for the individual child were not written first, and then the services suggested to meet these goals. Instead, placement was selected in the context of available services.

The occurrence of the explanation of parents' rights after the placement decision, but before the goals and objectives were written was particularly telling in this regard. The following was typical of the statements read to parents during placement meetings:

> District Rep:
> Mrs. Ladd, if we, um after evaluating Shane find that, um, we don't have the proper placement, the classroom available, appropriate placement for Shane, that you can request-or you have rights to private school and you can request that. We've made the decision that we do have a class available for Shane to go into. (E&P #33.97.1-5)

This statement indicates that the availability of an educational program had been determined before the goals and objectives for the student has been determined. This practice effectively forecloses discussion of educational

alternatives.

Organizational Arrangements Within Committee Meetings

The organization of E&P meetings compliments the organizational practices occurring earlier in the referral process. Placement outcomes were not so much decisions debated in the meetings as they were actions presented to the committee members (including the parents who were present). As a consequence, the committees seemed to confirm previous actions rather than activily make decisions.

This section of the final report attempts to uncover the organizational arrangements that provide for this presentational manner of making placements. In order to reveal the machinery that provides for this mode of reaching decisions, it is necessary to go beyond the texts of the decision making phase of the meeting, into the events that lead up to it. One transcript of the information presentation phases of a committee meeting in which a student, Shane, was placed in an LDG program, will be used to illustrate this point.

There are a number of striking patterns in the language of the four reports made to the committee during the initial "information presentation" phase of the meeting. These form-function relationships lead to a distinction between "lay" and "professional" reports. This distinction indexes an important part of the role that language plays in authority relations within the institutionalized order of the school, which, in turn, reveals some of the grounds upon which decisions are made.

The discussion of form-function relationships begins with a consideration of speaker-format relations. [20]

Speaker-Format Relations. The information that the committee obtained from the classroom teacher and the mother appeared in a different form than the information made available by the school psychologist and the nurse. The information that the nurse and the psychologist had about the student was presented to the committee in a single uninterrupted report.

The meeting was started by the school psychologist. She introduced the purpose of the meeting as follows:

1 Psy Um. What we're going to do is, I'm going to have a brief, an overview of the testing because the rest of, of the, the committee has not, uh, has not an, uh, been aware of that yet. And uh, then each of us will share whatever, whatever we feel we need to share.

2 Prin Right.

3 Psy And then we will make a decision on what we feel is a good, oh (3) placement (2) for an, Shane.

The school psychologist immediately provided the committee members with the information she had about the student:

3 Psy Shane is an nine years old, and he's in fourth grade. Uh, he, uh, was referred because of low academic performance and he has difficulty applying himself to his daily class work. Um, Shane attended the Montisorri School in kindergarten and first grade, and then he entered Carlsberg-bad in, um, September of 1976 and, uh, entered our district in, un, '78. He seems to have very good peer relationships but, uh, the teachers, uh, continually say that he has difficulty with handwrit-

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20. See Hymes (1974) and Ervin-Tripp (1973) for the original seminal statements about the importance of form-function relationships for an understanding of language in society.

ing. 'kay. He enjoys music and sports. I gave him a complete battery and, um, I found that, uh, he had a verbal I.Q. of 115, performance of 111, and a full scale of 115, so he's a bright child. Uh, he had very high scores in, uh, information which is his long-term memory. Ah, vobaculary, was, ah, also, ah, considerably over average, good detail awareness and his, um, picture arrangement scores, he had a seventeen which is very=high

4 S.E.T. Mmmm

5 Psy every superior rating, so he, his visual sequencing seems to be good and also he has a good grasp of anticipation and awareness of social situations. Um, he (5) (she is scanning her notes) scored in reading at 4.1, spelling 3.5, and arithmetic 3.0, which gave him a standard score of 100 in, uh, reading, 95 in spelling, and 90 in arithmetic. When compared with his <u>overall</u> score, it does put him somewhat ah below his, you know, his capabilities. I gave him the Bender Gestalt (clears throat) and he had six errors. And his test age was 7-0 to 7-5 and his actual age is nine, so it, uh, he was considerably beneath his, uh, hisuh, age level. (2) His, I gave him the, uh VADS and his, um (5 or 6) (looking through notes) both the oral-aural and the visual-written modes of communication were high but the visual oral and the oral written are low::, so he, uh, cannot switch channels. His expressive vocabulary was in the superior range (6). Uh, visual perception falls above age level, so he's fine in that area (6). And fine motor skills appear to be slightly lower than, uh, average, (voice trails off slightly), I saw them. (3) He read words very quickly when he was doing the academics but I didn't see any reversals in his written work. Uh, I gave him several projective tests and, um, the things that I picked up there is that, um he <u>does</u> possibly have some fears and anxieties, uh, (5). So I had felt ah, that perhaps he might, uh, uh, benefit, um, (3) from special help. He also was tested, um, in 1976 and at that time he was given the WISC-R and his I.Q. was slightly lower, full scale of a 93 (3 or 4). His, um, summary of that evaluation, uh, was, uh, he was given the ITPA and he had high auditory reception, auditory association, auditory memory. (2) So his auditory skills are good. (3) He was given another psychol- psychological evaluation in 1977. He was given the Leiter and he had an I.Q. of 96 (6). And, um (3 or 4) they concluded that he had a poor mediate recall (2) but they felt that was due to an emotional overlay and they felt that some emotional conflicts were, uh, interferring with his ability

to concentrate.

While it is true that the psychologist is presenting information about the student (his age, the schools he has attended, his scores on educational tests), she is doing much more with her talk than merely presenting information. She is constructing an account about him: a biography. Her account indicates that he is not just any student, but he is a special student. As such, he is a candidate for special education. Furthermore, she is making the case that he is a "learning disabled" student. While he is "a bright child," (3.9), some of his skills are superior, or at least above average, while his performance is poor in certain, selected areas.

At the end of this presentation, the psychologist asked the student's teacher to provide information:

5 Psy Kate, would you like to share with u:s?

6 CLT What, the problems I see ( ) Um...

7 Psy Yes.

8 CLT Um. Probably basically the fine motor types of things are difficult for him. He's got a very creative mi:ind and expresses himself well ( ) orally and verbally and he's pretty alert to what's going on. (2) Maybe a little bit <u>too</u> much, watching EVERYthing that's (hh) going (hn) on, and finds it hard to stick to one task. And <u>mostly</u> I've been noticing that it's just his writing and things that he has a, a block with. And he can rea:ad and comprehend some things when I talk to him, <u>but</u> doing independent type work is hard for him.

9 Prin. mhmmm, putting it down on paper...

10 CLT Yeah::, and sticking to a task//

11 Princ. mmhmmm

12 CLT =and getting it done, without being// distracted by (nenhehneh)...

13 SET. How does he relate with what the other kids do?

14 CLT Uh, very well (slight stress). He's got a lot of frie:ends, and, uh, especially, even out on the playground he's, um (3), wants to get in on the games, get on things and is well accepted. So::, I don't see too many problems there.

CLT=Classroom Teacher

In this sequence, we have the classroom teacher beginning to present some of the characteristics of the student (8), and being interrupted by the principal (9), before the special education teacher took the floor (13). From that point on, the special education teacher asked the classroom teacher a series of questions about the child's peer relations (13), reading level (15), performance in spelling (21), and math (27). The school nurse also participated in the questioning of the teacher. She asked the teacher how "she handled the reading problem" (29). After the school psychologist moved the discussion away from these academic concerns to a more personal one: how the student handles failure (40), the questioning shifted to the mother. The special education teacher asked the mother about his fine motor control at home:

46 SET How do you find him at <u>home</u> in terms of using his fingers and fine motor kinds of things? Does he do//

47 Mother =He will, as a small child, he didn't at all. He was never interested in it, he wasn't interested in sitting in my lap and having a book read to him, any things like that//

48 SET mmmm

49 Mother =which I think is part of it you know. His, his older brother was just the opposite, and learned to write real early. <u>Now</u> Shane, at night, lots of times he comes home and he'll write or draw. He's really doing a lot

50 SET ( )

51 Mother =he sits down and is writing love notes to his

girl friend (nennen). He went in our bedroom last night and turned on the TV and got out some colored pencils and started writing. So he, really likes to, and of course he brings it all into us to see//

52 SET =mhmmm

53 Mother and comment on, so I think, you know, he's not NEGAtive about//

54 SET =no

55 Mother =that anymore

56 SET =uh huh

57 Mother He was before, but I think his attitude's changed a lot.

These transcript inserts are representative of the manner in which information about the student was made available to the members of the committee by the psychologist, the teacher and the mother. They show that the information that the nurse and the psychologist had about the student was presented to the committee in a single, uninterrupted report, while the mother's information was elicited from them by other members of the committee. In fact, the classroom teacher's presentation and the mother's presentation took the form of an interrogation. Information from the mother and the teacher became available to the committee in the form of answers to questions posed by the committee members.

The format of the classroom teacher's report and the mother's report is different from the psychologist's and the nurse's in another respect. The psychologist provided a summary of the results of a given test or subtest in a standard format. She named the subtest, reported the student's score, and gave her interpretations of the results. For example:

3.9 I gave him a complete battery, and I found that, uh, he had a verbal I.Q. of 115, performance of 111, and a full scale of 115, so he's a bright child

3.11 He had very high scores in, uh, information, which is his long term memory.

3.14 His, um, picture arrangement scores, he had a seventeen, which is very high, very superior rating.

Thus, the educational test results provided the grounds of the psychologist's assertions about the student. [21]

Perhaps because the mother and the teacher were being interrogated, their information was not presented to the committee in a standard format. For example, the teacher provided general statements "he's got a very creative mind and expresses himself well" (8), as well as some more specific assertions: "he can read and comprehend some things when I talk to him, but doing independent type work is hard for him" (8). The format of the mother's presentation is different from both of these. Her turns at talk were lengthy answers to immediately preceeding questions and were embedded in commentary on previous discussions.

Source-mode relations. The sources of information for the classroom teacher's report and the mother's report are also different from that of the psychologist and the nurse. Whereas the nurse and psychologist reported information about the student based on educational tests, the classroom teacher and mother based their reports on first hand observations. While the classroom teacher's observations were confined to a relatively short temporal unit (a school year) and a circumscribed spatial and social arrangement (the

21. Turn #5 contains many other tokens of this presentational format. Alternative forms are to be found in turn #3.

classroom), the mother's observations concern the child's actions in a wide variety of situations, and span a lifetime. Thus, the information gathered by systematic albeit indirect observations (i.e., that gathered from specialized tests) was presented to the committee, while information that was gathered by direct albeit unguided or unstructured observation (which included information about classroom experiences and home life) was elicited from participants.

Mode-speaker relationships. The mode in which information was presented to the committee varied according to the status and official expertise of the participants in the meeting. In terms of the official table of organization in the district, the psychologist and the nurse are ranked higher than the classroom teacher (and the mother is not an official part of the educational system). The nurse and the psychologist work for the district office; the teacher works for one particular school. Technical expertise is coupled with this status ranking. The nurse and psychologist have advanced degrees, and represent technical specialities.

Furthermore, the school psychologist has an institutionally designated role responsibility. Part of the role of school psychologist involves accumulating all the information available about the child being considered by the committee. To do so, the psychologist had discussed the child with the teacher and his mother, and observed him in the classroom. As "case carrier," then, she had more knowledge about the child than any single individual attending the meeting. While the mother knows the child at home, and the teacher knows him in the classroom, only the psychologist has this information compiled in a single place.

Not only does the psychologist have "mere" information, calibrated in terms of quantity or amount, the school psychologist has "official" i. e., qualitatively different, information about the child. She has administered official and professional tests to the child. This official information is coupled with the information gathered from many other sources to compose the "case."

This combination of technical expertise and organizational rank is manifest in the stratification of talking arrangements present in the meeting. The most highly technical information (that from tests) was made available by the most highly trained people in attendance at the meeting, while the personal observations were made available by the participants with the least technical expertise. Speakers of officially higher rank and who spoke with their authority grounded in technical expertise, presented their information, while speakers of lower rank, who spoke with authority based on first hand observations, had information elicited from them.

Topic-Speaker Relationships. There is another interesting form-function relationship in evidence in this phase of the meeting, a correlation between topic of discussion and speaker (see Figure 3.1).

--insert Figure 3.1 here--

Academic information (including educational test results, academic performance in class) is the domain of educators. It is discussed by teacher, nurse, and psychologist. Emotions and feelings (including attitudes toward school and a new educational program), are the province of mothers and teachers. In fact, with one exception, the only topic that the mother is called on

TOPICS OF DISCUSSION	TRANSCRIPT LINE	SOURCE OF INFORMATION (SPEAKER)	MODE OF PRESENTATION
1. results of ed. testing	a) 3.2-5.30	School Psychol.	reading report; informative speech act
	b) 91	Nurse	reading report; informative speech act
2. academic performance in class	8-34	Classroom Teacher	elicitation; responsive speech acts
3. Student's reaction to failure	40-45	Classroom Teacher	elicitation; responsive speech acts
4. Student's feelings in class	58-61 82-89	Classroom Teacher	elicitation; responsive speech acts
5. Student's reaction to Special Ed.	a) 73-74	Classroom T.	elicitation; responsive
	b) 71-72	Mother	elicitation; responsive
6. Fine motor problems at home	46-57	Mother	elicitation; responsive
7. Student's sensitivity at home	62	Mother	informative speech act
8. Student's attitudes toward school	63-68	Mother	elicitation; responsive speech act
9. Student's feelings	71-81	Mother	elicitation; responsive speech act
10. Reason for problem	a) 8-12	Teacher	elicitation; responsive speech act
	b) 37	Learning Disability T.	informative speech acts

Figure 3.1

TOPIC-SPEAKER RELATIONSHIPS IN INFORMATION PRESENTATION PORTION OF E & P MEETING

to comment on is the emotional aspects of the case before the committee. The one exception was the topic of the student's small motor control activities at home. And, this issue was raised after the committee had established the fact that this was the source of the student's difficulty, so the mother's contribution was not a crucial piece of information.

The Distinction Between Lay and Professional Reports

In sum, the mother's and the teacher's reports have the following features in common:

1. Their mode of presentaton was elicitation;

2. They were made available by people who occupy either low status or temporary positions[22] (both in terms of institutional stratification and distribution of technical knowledge);

3. Their claims to truth were based on common sense knowledge;

4. Their reports were based on direct albeit unguided or unstructured observations.

By contrast, the psychologist's and the nurse's reports had the following features in common:

1. They were presented, not elicited;

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22. Our thanks to Gail MacColl who pointed out to us that parents, unlike all other participants in committee meetings, are temporary members.

2. They were presented by people who occupy high status positions;

3. Their claims were based on technical knowledge and expertise;

4. They were based on indirect albeit guided or structured observations.

We call the first "lay reports" and the second "professional reports." The distinction between lay and professional reports contributes to an understanding of the process of reaching decisions in these committee meetings. It gives us a way to understand the "presentational" way of making decisions observed in these meetings. The authority of the professionals recommendations are grounded in the differences in the structure of these two kinds of reports. The role that language plays in grounding the authority of accounts is explored further in the following section.

The Mystification of Language and the Language of Mystification

There is a significant difference in the way in which professional reports (i. e., those offered by the psychologist and the nurse) on the one hand and the lay reports (i. e., those offered by the classroom teacher and the mother) on the other hand are treated by other members of the committee. The reports by the psychologist and the nurse are accepted without question or challenge, while those of the mother and the teacher are interrupted continuously by questions. No one asked the psychologist or the nurse to clarify the technical terms during their reports, while the classroom teacher and mother were often asked to provide further information or to clarify previous statements. We have already characterized the classroom teacher's report as an interrogation: the classroom teacher presented information, and either the special education teacher, the principal, the psychologist, or the nurse asked

ner for further information (see transcript line # 8). Neither the mother nor any of the educators present asked the psychologist for more details, further information, or to clarify technical terms.

In fact, the mother made only one request for clarification during the course of the entire meeting--and that was at its conclusion, just as the formal business was being finished. Her question was about "PE":

422 SET check over ((( ))) (5-6) I don't think I addressed P.E.

423 Psy I don't think we un, <u>on</u>, ok, we do not need that, okay, he does not need physical edu//

424 Mot. ((I want to ask something about that while you mentioned P.E. You mean physical education/))

425 ? mmhmmm

426 Mot. Does the school have a soccer program/ or is that just totally separate from um, you know, part of the boys' club or::-

427 Prin =Right. It's a parent organized, um, association-

428 Mot Is there something at the school that would have information on it if it comes up in the season, because Shane really has expressed an interest in that

Mot=Mother

One way to account for the differential treatment of the professionals and lay person's report, especially the differences in requests for clarification of technical terms and the grounds of conclusions is in terms of "membership." While the psychologist's and nurse's statements about educational test results and their interpretations may be obscure to non-educators (i.e., researchers), they are in fact, comprehensible to the participants themselves. What seems to be a problem for outsiders, is not a problem for members of this particular community.

However, that account does not explain the mother's request near the end of the meeting about the meaning of the expression "PE." If the technical terms used in this meeting were to be ranked in order from the most technical to the most ordinary, then "PE" would appear closer to the everyday usage end of the continuum than terms like "VADS," "Bender Gestalt," "aural oral channel of communication." Yet, the mother requested information about PE and not these other terms. The "membership" account also does not account for the points of clarification directed at the classroom teacher.

As a result of the weakness inherent in the membership account, we are inclined to consider another possibility: the authority of the professional report resides in the very mode of its presentation. The parents and other educators do not challenge the ambiguity of the psychologist's report because they do not have the grounds to do so.

Meaning is negotiated in everyday discourse. Speakers and hearers both take responsibility for the construction of understanding. According to observers from a wide variety of perspectives, a first maxim of conversation is that speakers will speak clearly; they intend to make sense and be understood (Grice, 19 ;Merleau-Ponty, 1964; Sacks, Schegloff,Jefferson, 1974). Hearers contribute to meaning in discourse by making inferences from the conversational string of utterances. They display their understanding actively, through "back channel work" (Duncan, 1972), which includes eye contact, head nods, and vocalics such as uh huns, and even lexical items like "I see," "I understand." When the hearer does not understand "a request for clarification," the manifest purpose of which is to obtain more information, is in order. The request for clarification is generated by the hearers when they

do not think that the speaker is speaking clearly.

The grounds for this kind of negotiation of meaning are removed from the committee by the institutionalized trappings of the meeting. As indicated above, the psychologist had been designated "case carrier." As case carrier, the psychologist assembled the "file" on the student. The file represents the official, school sanctioned version of the student being considered by the committee. The psychologist presented her report. In doing so, she is presenting the school's case concerning the student. The case is the culmination of institutionalized work. She is speaking for the institution in her presentation. The school psychologist's presentation of the case to the committee is augmented by officially sanctioned props. These include the case file itself (a bulky manila folder on display in front of the psychologist), test results, carefully prepared notes, and her designation as leader of the meeting. When she presents the case, she reads from notes. By contrast, the mother and the teacher have no such props. They speak from memory, not from notes. They call upon remembered knowledge of first hand observations, not compilations of remembered information.

The grounds for negotiation of meaning are removed further by the way in which the psychologist presents information to the committee. The psychologist, through her report, is claiming privileged knowledge about the child, and is making a recommendation about the next step in his educational career. The privileged status of the psychologist's expertise is displayed in the technical language of her report. There is a certain mystique in the use of technical vocabulary, as evidenced by the special status that the technical language of doctors, lawyers, and businessmen is given in our society (Shuy,

1973, Philips, 1977; Shuy and Larkin, 1978). Technical language is mystifying (Marcuse, 1964; Laing, 1967; Habermas, 1972); its use indicates a superior status and a special knowledge based on long training and specialized qualifications. When the school psychologist speaks, then, it is from an institutionally designated position of authority. The authority of the psychologist's claims are grounded in her official capacity as case carrier. To interrupt, to question, to request a clarification of the psychologist, then, is to challenge the authority of the official position of the district and its representative concerning this child.

When technical language is used, and embedded in the institutional trappings of the formal proceedings of a meeting, the grounds for negotiating meaning are removed from under the conversation. Because the speaker and hearers do not share membership in a common language community, the hearer does not have the expertise to issue a challenge. The hearer is placed in the position of assuming the speaker is speaking knowledgeably, and the hearer does not have the competence to understand. When technical language is used, even though the possibility for active negotiation of meaning seems to be removed, the guise of understanding remains. Yet the understanding is a passively achieved one, not the active one associated with everyday discourse. Instead of signalling a lack of understanding via such tacit devices as back channel work and manifest ones like requests for clarification, the committee members (including the mother) remain silent, thereby tacitly contributing to the guise that understanding has been achieved.

Summary

The differences in the manner in which the professional and lay people in the committee reported information highlights the way in which the language that people use structures role relationships. And, the structure of role relationships found embedded in the language used by the committee members, in turn, provides the grounds of the authority of the claims and recommendations made. Despite the fact that they were composed of a highly technical vocabulary, the professional reports were accepted without challange or question, while the lay reports were continually interrupted with requests for clarification and further information.

This differential treatment can be understood in terms of the authority that reports gain by their very mode of presentation. The ambiguity of professional reports is not challanged because the obscurity of professional language shrouds professionals in a "cloak of competence." The authority of the professional report comes from its very incomprehensibility and its obscurity. The psychologist and the nurse gain their authority from the mastery and use of a technical language that others do not understand and do not question. The professional report gains its status and authority by virtue of the fact that it is obscure, difficult to understand, and is embedded in the institutional trappings of the formal proceedings of the committee meeting. And, it is this authority that contributes to the assembly of the presentational manner of reaching decisions observed in the committee meetings, such that decisions are "presented," not "discussed," "argued," or "negotiated."

Here we have yet another instance of the "politics of experience" (Laing, 1967; Pollner, 1975; Mehan and Wood, 1975: 215 -218). The various members of the committee experience this student differently. More specifically, the Classroom Teacher and the Mother provide accounts about the student's performance that compete with the Professional's version of the student's academic difficulties. Yet, by meeting's end, one version of the student, that provided by the Psychologist and the Nurse, prevailed.

In concert with others, people work to establish some unequivocal foundation beneath such "endless equivocalities" (Pollner, 1975: 411). Often, consensual resolutions are achieved when one or another protagonists relinquish their experience of the world as the preferred version. In this case, the resolution was not negotiated. Instead, the members of the committee resolved the disjuncture between lay and professional versions by credentialling the Professional version as the official version of this student.

Thus, by the time the committee votes, a case has been made for a particular placement. The committee's "vote," then, is not so much a decision as it is an confirmation of the case as it has been presented. In deciding cases in this way, the committee members are treating each other as "informed citizens" (Schutz, 1964: 120-34). They acknowledge that the authority of the others' actions resides with the information they have as a consequence of the social organization of the school, and the knowledge gained from their professional expertise.

Conclusions.

Some of the institutional practices that contribute to the assembly of educational placement decisions have been described in this paper. The status of these practices now needs to be underscored.

Ratification of Actions Taken Earlier.

This investigation of the organizational practices of decision making shows that placement outcomes were not so much decisions reached in the meetings as they were ratifications of actions that took place at previous stages of the decision making process. This is not to say that the E&P is simply applying a rubber stamp to decisions made surreptitiously (Becker, 1963) or performing a public ritual to parade decisions made behind the scenes (Goffman, 1961). The distinction between conspiracy and ratification is similar to the organizational differences between the problems posed to subjects in experiments and those organized by participants in naturally occurring situations.

In an experimental situation, a finite number of variables is presented to the subject. The subject's job is to sort among this small number of variables. Thus, the problem is under the control of a single person or can be managed by that person. The information available to the committee is not of the same sort. The number of variables that the committee has to consider is large, much larger than that which is presented to the subjects of an experiment. The scope and complexity of the variables is so great, in fact, that each single member of the committee doesn't know them all, or even what they are. In fact, part of the project of the committee is to first find out what

tne relevant variables are, and then sort tnem out. By contrast, the subjects in experiments have only the sorting operation to perform, because the variables have been isolated and presented to them.

The problem solving situation for the placement committee is like other naturally occurring situations and unlike experimental situations by virtue of the presence of others who serve as social resources (Lave, 1979; Cole and Traupmann, 1980; Levin and Kareev,1980). The committee members are knowledgeable, not only in the general sense of being highly trained and experienced educators, but each committee member has a repository of information about the particular student being discussed. Each person comes to the meeting as an "informed citizen" (Schutz, 1964:120-134) about the student. They have a memory of similar committee meetings held in the past as part of their stock of knowledge. The information upon which decisions are being reached is not any one individual person's memory; it is in the collective memory of the group.

Therefore, it is more productive to think of the E&P committee meeting as a culmination, a formalization of a lengthy process that originates in the classroom. The construction of an educationally handicapped student's career or educational biography starts when the teacher makes the initial referral. Often, tne teacher only has a general notion that a student "is in trouble," or "needs help." This initial, rather general attribution establishes the presumption of a handicap. This attribution becomes refined as more and more institutional machinery (e. g., tests, committee meetings, home visits) is applied to tne case, until, finally, by tne placement meeting, only a parent's refusal to sign the documents during the placement meeting would be likely to

change the assumed placement. The fact that all but one of the cases brought before E&P committees resulted in special education placement is further evidence that early actions were being ratified at this stage in the process.

This ratification of actions reached at earlier stages or events in the referral process is similar to the process by which a person becomes transformed from a "normal person" to a "mentally ill patient" (Goffman, 1961; Scheff, 1966; Rosenhan, 1973). The process of the construction of mental illness starts when a person is presented to a public health official. The entrance of a specialist into a situation that has been defined as "something wrong with someone here" establishes the presumption of a defect within the individual. This presumption is reaffirmed as the person, now a patient, goes through successive stages of the psychiatric intake process, until, finally, the staff and patient alike accept the definition.

This ratification of decisions between successive events or stages in a diagnostic process is similar to what Elstein et al (1978) found within one particular diagnostic event. They report that doctors tend to generate a particular hypothesis about the cause of a disease early in the diagnosis of a patient, well before most of the data has been obtained. Instead of weighing evidence to eliminate a number of possibly competing hypotheses, doctors take steps which tend to confirm the hypotheses generated early in the diagnosis, thus ratifying presumptions developed earlier.

Practical Constraints and Institutional Decisions

This investigation of the organizational practices of decision making also shows there is no need to disparage everyday decision making by comparing it with rational models, formal reasoning or scientific thinking. Wason (1977:112) quotes a letter from Sir Cyril Burt about a conversation he had with Bertrand Russell about the use of the predicate calculus (which is at the heart of scientific reasoning) as a model for everyday reasoning:

> Logic...used as a method of analysis would be both inappropriate and illuminating but used as a standard for critical evaluation it would not only be inappropriate but highly misleading. Piaget seems to have fallen in to the trap thus indicated. After a series of ingenious experiments and valuable psychological observations, he suddenly assumes the Cambridge logician's academic gown, and judges the children's performance in terms of the continental version of the Russell-Whitehead symbolism. I am thinking of the ideal adolescent who is supposed to perform a combinatorial analysis yielding 16 alternatives and to test them systematically. He forgets that this logic is modelled on the mathematician's ideal: it is not the logic of everyday life.

When describing the way in which everyday decisions are reached in institutional settings, it seems unnecessary to posit a gap between some ideal model and actual practice. Instead, it seems more appropriate to call into question the efficacy of scientific reasoning as a model of everyday reasoning, because there are good organizational reasons why institutional decision making occurs in the way that it does. The decision making circumstances assumed to exist by the rational model are not available to problem solvers in formal organizations like schools, hospitals, and businesses (cf. Bensen, 1977; Maron and Olsen, 1976; Weick, 1976). Decision makers simply do not have the unlimited access to unlimited resources presupposed by rational decision making models.

Furthermore, the rational model assumes that all the factors being considered in the decision making calculus have an equal weight. But, in the complexity of institutional settings, not all factors necessarily do have an equal weight. A certain fastitiousness is required when considering all the alternatives, which can blind the decision maker to an appreciation for the most important factors that need to be taken into account. As Watkins (1970:206) says:

> "A well known obstacle to computerizing chess is the lack of any known way to program a computer to concentrate on interesting developments: like the ideal decision maker of normative theory, the computer surveys the entire board and take every possibility into account."

In the case of our school district, fiscal, legal, and practical circumstances constrain the process by which decisions are reached. For example, when considering the placement of a student into a special education program, the students' age, gender, IQ scores and space available in a program may all be factors to consider. But, as we have seen, the space available in the program may be the overwhelmingly important factor, outweighing all others in their consequences for decision makers. That is, in dealing with comparable problems, prior experience may tell decision makers that it is best to be highly selective, and to pay attention to a few salient alternatives which they know well in advance, instead of painstakingly computing the combinatorial of all possibilities. These organizational constraints and this prior knowledge lead educational decision makers to reduce the range of alternatives, make educational placements by available category, and ratify actions taken earlier.

Institutional Practices and Problem Solving Heuristics

Cognitive psychologists have described a number of heuristics that individual problem solvers use to cope with information overload, limitations of short term memory, and other information processing limitations. Some of these heuristics include the "salience heuristic" (used to select information), the "availability heuristic" (to recall information), the "representativeness heuristic" (to classify) and the "anchoring heuristic" (to retrieve initial judgments) (Tversky and Kahneman, 1974; Norman and Bobrow, 1975). Some of the institutional practices that groups of people working in social organizations have devised to cope with the practical, legal, and fiscal constraints on decision making have been described in this paper. These practices are part and parcel of an institutionally arranged system for making frequently recurring decisions (cf. Quinn, 1976).

Problem solving heuristics and institutional practices are similar processes, although their locus of operation seems different. Problem solving heuristics are thought of as operating "between the ears" of individuals; institutional practices operate "between the people" in an organization. Thus, we have similar cognitive processes recapitulated at different levels of social structure. While the psychological and social operations are similar, one does not reduce to the other. Decision making at the institutional level will not be described simply by adding a few more factors to a psychological model (as Simon, 1976; 253-67 has suggested) nor vice versa. A complete cognitive theory will need to include a description of both psychological and social cognitive operations, and a description of their articulation together (Laboratory of Comparative Human Cognition, 1981; Cicourel, 1980a, D'Andrade,

1981), in order to account for how both sets of processes are made manifest in interaction between people.

Socially Distributed Decision Making

A number of important psychological theories, including those of Piaget, Witkin & Berry and Simon have been characterized as incorporating a "central processing" feature (Laboratory of Comparative Human Cognition, 1981). Central processing in this context implies a universal set of cognitive operations, internal to the individual which operate in a centralized fashion to control how the world is interpreted and acted upon.

Central processing is also a feature of the rational model of decision making, in both its "comprehensive" and its "bounded" forms. Central processing in the psychological context implies the operation of a unitary actor. Individual problem solvers or large scale organizations make choices by considering payoff functions, generating possible alternatives, assessing consequences of probabilities, and the rest; and they do so in centralized, controlled ways on particular occasions.

The decision making we have observed in this institutional context does not have the features associated with central processing. Instead, decision making seems to be "socially distributed." The decision making is distributed in two senses of the term: across participants and through time.

Decision making is distributed across participants in that information about the case is not under the control of any one committee member. Various members of the committee have information about certain aspects of the case (the teacher knows about the student's classroom activities, and the

psychologist knows about the student's test performance, and the nurse has made a nome visit). Decision making is distributed tnrough time in tnat bits an pieces of tne final decision are made at various stages in the referral process depicted in Figure 1. The process starts in the classroom, information is added at appraisal, assessment, and reappraisal phases. Meetings with parents provide still more information to some, but not all, of the committee members.

Thus, information is gathered at different points in time and is scattered across various committee members. The first time that the committee nears all tne particulars of a case is in the E&P meeting. It is at this time tnat the complete picture of the student emerges from the particulars previously distributed across tne temporal pnases of the referral process and tne separate committee members.

Tne decision making situation in which the variables or information are not under tne control of any one person is an example of what Schutz (1964:120-134) nas called tne "social distribution of knowledge," and wnat cognitive psychologists have called "distributed processing" (Laboratory of Comparative Human Cognition, 1981; Levin, 1981). In socially distributed processing, the information upon which decisions are made is in tne collective memory of tne group, not in any one individual's memory.

Tnis distinction between central and socially distributed processing enables the logical status of the committee's actions to be reconsidered. Looked at from the point of view of a group of people deciding an educational placement based on a student's needs, tne committee seems illogical, irrational, because it is not considering the full range of possible placements,

not considering one variable at a time, not reviewing the complete means-ends matrix. But, this interpretation dissolves when a socially distributed view of decision making is taken into account. The actions of the committee look more rational when one realizes that many factors, including money available, space available, teachers' schedules and compatibility, and legal constraints, as well as the students' needs were entered into the equation. So, too, while the combinatorial of all possible placement categories was not considered in any one committee meeting, the full range can be seen distributed across referral, appraisal, and evaluation phases of the referral process (see Figure 1). Watkins (1970: 206) captures this aspect of everyday decision making practices exactly:

> An ideal decision scheme is pictured as being present to the agent's mind in its entirety, a completed whole in which the several components simultaneously play their dual role. An actual decision scheme is usually built up bit by bit, so that the arrival of an isolated bit of situational information may have a disproportinate influence. And even when all the evidence is in, the practical significance of different parts of it may wax and wane as the decision maker attends now to this factor, now to that.

Organizational Choice and Organizational Routine.

The rational model of decision making implies that events have causes, and that bureaucracies perform large actions for large reasons. For some purposes, organizational behavior can be usefully summarized as action chosen by a rational decision maker, centrally controlled, completely informed, and value maximizing. However, the present work and other work (Allison, 1971; March and Olsen, 1976), suggests that such a view must be balanced by the appreciation that large organizations are highly differentiated decision making structures. By this "organizational process" view, large acts emerge from

many smaller actions, socially distributed across many levels of an organization. These small acts are the consequence of regular procedures. Standard operating procedures constitute routines for dealing with standard situations. Routines allow large numbers of ordinary people to deal with numerous instances day after day. In this district we see such routines as directives written to enact the provisions of special education federal law, directives written about MR students and off-campus placements, the organization of the sequence of decision making, and the temporal order in the conduct of business in a given E&P meeting. Such organizational routines and institutional practices described above structure decision making situations and narrow the possibilities in terms of which decision makers can make decisions about students' placement.

Furthermore, the project before the committee is preeminantly a practical one. The decision making task is a part of the educaters' job, a routine event in the course of their daily, institutional lives. This practical concern makes the committee sensitive to the nature of the particular case before them and its particular outcome. The committee is faced with a specific problem that demands an immediate and concrete solution, and demands it now. They are concerned with this student, this placement, at this time. They are not concerned with generating the range of all possible actions that exist in the abstract for the sake of doing so. Thus, the members of the committee have a pragmatic not a theoretic motive for their actions (Schutz, 1964; Scribner, 1977). Their project is to get this work done, to settle this case, so that they can get back to other practical projects that are piling up on their desks or that await them in their classrooms.

In that respect, the actions of the committee are similar to the actions of grocery shoppers. Lave (1979) reports that grocery shoppers do not often make complex mathematical calculations overtly. Numerical calculations are submerged in the practical project of getting groceries. In a similar manner, the committee's "decision making" is submerged in the practical activities confronting the committee members during the course of their daily, institutional lives. In both cases, what appears to be the manifest project (from the point of view of rational action i. e., making calculations, making decisions) turns out to be a component part of more inclusive practical projects. The manifest cognitive task is embedded in an ongoing project of action.

What we have here is a shift in perspective--a shift in metaphor, really--for viewing organizational behavior. When organizational behavior is examined from the perspective of the rational model, "acts" and "choices" are seen, and "reasons" and "motives" are searched for. When organizational behavior is examined from the perspective of the organizational process perspective, one sees end results, and looks for the routine practices that constitute them. As a consequence of this shift in perspective, organizational behavior can be understood less as deliberate choice, and more as end results, or consequences of organizations functioning according to standard operating procedures. For this case study, this shift in metapher means that the placement of a student is more a function of organizational procedure than organizational choice. The placement of a student in a special education program is not so much a decision made as it is an enactment of routines.

SECTION 4. EDUCATORS' ACCOUNTS OF STUDENTS' BEHAVIOR

The overarching concern of this study is the description of the institutional practices that compose decisions made about students. The decision making process involving the referral of students starts in the classroom for the most part. As we described in Part I of this Report, the classroom teacher most often takes the action that activates the referral system. An important component of decision making about referral students is the perceived cause of the students' behavior that led to the referral. We are interested in the bases or grounds upon which teachers and other school officials make decisions about referral students at each of the key junctures in the decision making process. We are particularly interested in uncovering the causes or reasons for teachers' referral decisions.

Mediating Cognitive Processes

Our investigation of educators' views about the causes of students' school difficulties is informed by work on cognitive processes in several disciplines. A denominator common to these studies is the recognition of the importance of subjective meaning as a mediating influence in social life.

Observations about the importance of subjective meaning have been made at least since the turn of the century. Mead (1934) considered individuals to be creators of their environments in the process of social life. This reflects Thomas' theorem that situations defined as real are real in their consequences.

> Not only concrete acts are dependent on the definition of the situation, but gradually a whole life policy and the personality of the individual himself follow from a series of such definitions. (Thomas, 1931:41-50)

For Mead (1934:8) this was the emergence of mind:

> The evolutionary appearance of mind or intelligence takes place when the whole social process of experience and behavior is brought within the experience of any one of the separate individuals implicated therein, and when the individual's adjustment to the process is modified and refined by the awareness or consciousness which he thus has of it.

For Weber it was an empnasis on "meaningful action":

> ...we are concerned with human behavior if and insofar as the agent or agents associate a subjective sense (Sinn) with it. (Weber, 1947:88)

The topic of subjective meaning has stimulated considerable interest in sociology and social psychology, contributing in part to the development of entire schools of thought, including those portions of "symbolic interactionism" (Blumer, 1969; Becker, 1963; Manis and Meltzer, 1967) concerned with the development of self, labelling theory, and those portions of social phenomenology and ethnomethodology concerned with the social construction of reality (e.g., Berger and Luckman, 1967; Garfinkel, 1967; Cicourel, 1964, 1973; Menan and Wood, 1975) and accounting practices (Garfinkel, 1967).

Information Processing and Teachers' Judgments

Another line of research that takes into account the goals, intentions, judgments, decisions and knowledge of teachers and students has been influenced by the study of human information processing (see Lindsay and Norman, 1972; Rumelhart, 1980). A general finding from such studies is that people's ability to process all the information in their environment is limited. More specifically, people tend to process information sequentially (step by step) rather than simultaneously (Newell and Simon, 1972). This active processing

goes on in a very limited short term memory (Newell and Simon, 1972). To make the environment predictable, information is chunked into more abstract units. Hence, the amount of information processed in short term memory can be increased (Miller, 1956).

As a consequence of these information processing limitations, people selectively perceive and interpret portions of the available information (Bruner, 1958), and construct a simplified model of reality (Newell and Simon, 1972). People make judgments and decisions and carry them out on the basis of their constructed model of reality. They use heuristics like the salience heuristic to select information, the availability heuristic to recall information, the representativeness heuristic to classify, and the anchoring heuristic to revise initial judgments (Tversky and Kahneman, 1974; Norman and Bobrow, 1975; Shavelson, 1980).

A wide and growing literature exists in the general area of planning and decision making by teachers which takes this information processing approach to the analysis of teacher judgments into account (see Shavelson, 1980 for a review). Shavelson (1980) has presented a model for teachers in which information processing heuristics combine information about students with teachers' beliefs and conceptions to produce judgments about both students and instruction. Another applicable information-processing concept is that of the "script" (Shank and Abelson, 1977) which has been used to describe teachers' routines for interactive teaching (Shavelson, 1980, Morine-Dershimer, 1978-79).

This research shows that teachers must process large quantities of information from such varied sources as their own observations, school records, and test scores to form judgments about students. Stebbins (1977) has identified six dimensions along which teachers evaluate students (knowledge, intelligence, neatness, oral expression, writing ability and shyness), but provides little specific information about how these judgments are formed.

Because other studies have shown that teachers' initial evaluations of students affects instructional decisions even when this initial evaluation is not valid (Dunsk, 1975), it is necessary that we try and understand the actual evaluation and judgment process of teachers as systematically as possible.

Attribution Theory

Attribution theorists have investigated the processes by which individuals make sense out of their environments through social perceptions and concept construction. Attribution theory (Heider, 1958; Kelley, 1967; Jones and Davis, 1965; Weiner et al, 1971; Dweck et al, 1975; Bar Tal, 1978) is the name given to investigations of how individuals in everyday life perceive events and persons and figure out what causes behavior. It is concerned with the antecedents and consequences of social perception and the processes through which we assign causes and attributes to ourselves and others' behavior. Attribution theories consider the bases on which these attributions are made. Taking the point of view of the lay observer, they consider the degree and mode of categorizing, interpreting, selecting and use of incoming and existent information in the social-perceptual field.

These processes are of utmost importance to an analysis of accounts given by school personnel concerning special education referral children. While there has been much research on attribution, most has been done under experimental conditions. Subjects are often presented with hypothetical vignettes describing a person in a situation and asked to respond to particular dimensions of causality or trait terms chosen by the researcher. Subjects are asked to make an attribution about the hypothetical information given to him/her. The categories or dimensions are provided for the respondent by the researcher.

The experimental study of hypothetical information using researchers' categories is not necessarily related to the process by which individuals actually go about making attributions in naturally occurring situations. By focusing on the interpretive accounts given by school personnel in interviews and decision making meetings concerning the children they refer, the cognitive aspect of the decision making process will be made more evident.

Weiner and his associates (1971; Weiner, 1972a, 1972b, 1974) have extended attribution theory into the educational domain. Weiner utilizes Heider's elements specifically as perceived determinants of achievement behavior in schools. Weiner and his associates maintain that individuals use the four elements as outlined by Heider--ability, effort, task difficulty and luck in their attributions regarding achievement related events.

Individuals have been shown to view the causes of success and failure as principally being due to ability, effort, the difficulty of the task, and good or bad luck. Weiner, following Heider, classifies these causal elements along two dimensions. One dimension differentiates causal elements in terms of

their locus of control--internality or externality. Thus, ability and effort would be considered internal because they originate within the person, whereas task difficulty and luck originate outside the person, and therefore are considered as external causes. A second dimension differentiates causal elements in terms of their stability over time. Thus, ability and task difficulty are considered stable because they do not vary if the same task is re-attempted, but effort and luck are considered highly unstable because they fluctuate over time.

The following table displays the four elements along the two dimensions (Weiner et al, 1971:96)

TABLE 4.1: ATTRIBUTION MATRIX

STABILITY OVER TIME	LOCUS OF CONTROL	
	INTERNAL	EXTERNAL
Stable	Ability	Task
Unstable	Effort	Luck

The following are examples of attributions made about children in achievement situations along these dimensions. If a child is viewed as "lacking ability," his/her educational problems are viewed as internally caused. If a child is viewed as "unable to perform the task at a certain time of day," his/her educational problem is viewed as externally caused. If the child's failure in school is attributed to either of these two factors, then Weiner's typology would predict educators would believe that there is not much hope for change, because both of these factors are considered relatively stable.

Likewise, if a child's failure at a task is attributed to "lack of effort," his/her educational problem is viewed as internal. But since effort is an unstable factor, it is possible for that failure to be reversed. If the failure is attributed to "luck," there would be less chance of a prediction for change, because even though luck is an unstable condition, it is outside the control of the individual.

Accounts and Semantic Relations

Related work which has a bearing on our present investigation concerns the critique of prevalent trait inference theories. D'Andrade (1965, 1974) and Shweder (1977) propose that inferences made on the basis of trait terms may be due to the semantic similarities in the meaning of terms.

D'Andrade (1965) asserts that an individual's memory of an event is more closely related to the cultural expectations of 'what goes with what' than what takes place in an actual event. He compared observations of small group interactions, ratings made immediately afterward by participants of each other's behavior, and ratings made by the observer after the session, with independent judgments of similarity of meaning for each pair of social-behavior categories used in the observation and rating scale. The participants' ratings and the observers' ratings were similar to each other, and to the cultural expectations as measured by the similarities of the social-behavioral categories. Neither of the participants nor the observer's ratings nor the semantic similarity judgments were similar to the record of the event as observed.

Shweder, expanding on this theme (1977), questions the validity of an individual difference theory of personality, maintaining that all this theory amounts to are statements about how subjects and researchers classify items of like meaning. He views the tendency for trait inferences to reflect semantic similarity groupings as a type of "magical thinking." Magical thinking is an expression of a universal disinclination to "draw correlational lessons from experience," and a universal inclination to seek symbolic and meaningful connections among events. This "magical thinking," as an expression of a cognitive processing limitation of the human mind is not only characteristic of primitive society, but industrialized society as well.

This and related work (Mischel, 1968; Canter and Mischel, 1979) is important because it augments questions raised in attribution theory concerning the relationship between the behavior beneath the attribution and the attribution itself. An assumption underlying trait theory and prevalent personality theories is that attributions index underlying conditions. D'Andrade, Mischel, and Shweder are challenging this tenet. For them, the dispositional consistency lies not so much in the person or the environment, rather, it lies in the labels used to describe these persons or their environments. These theorists take consistency out of the personality of the individual, and place it in the semantics of the language used to describe people.

Summary

Within the framework of the theories outlined above, we will consider the motivational, perceptual, and conceptual components of educator's judgments about the causes of students' behavior, especially that behavior which leads educators to refer students, identify them as educationally handicapped, and

place them into special programs for remediation. Upon completion of our analysis of our interviews and viewing sessions, aspects of the judgmental work employed by school personnel in the referral, identification, and placement of students will be more fully understood.

Interview Analysis

In order to determine educators views about the causes of students' school difficulties, portions of the interviews with educators ("viewing sessions") have been analyzed for statements chararacterizing students and their academic difficulties.

The materials.

We have interviews with 27 teachers who have referred 55 children, 6 interviews with psychologists about the educational testing situation, and the process by which they diagnose a student's behavior, three transcripts of decision making committee meetings, and three interviews with members of those decision making groups.

Interviews with the educators are lengthy, far ranging, and complex. They generate a wealth of materials. We aimed for an analysis that is comprehensive and which captures the educators' perspective on the educational and referral process. Although interview material was summarized, the interview transcripts have been retained and indexed so that information from the original source can be retreived.

The questions used in the interview are presented in our first end of year report (Menan et al, 1979) and in Combs and Hertweck (1979). Each interview was taperecorded and transcribed. Each educater in the study is identified by a number. That number is used to mark each interview with that educater, thereby preserving anonymity. Each line of the transcript is numbered. Each transcript is summarized. The summary cross-references the transcript line numbers so that the materials upon which a summary is made can be retreived.

With few exceptions the interviews were comprised of two major parts. One part covered a wide range of topics, i.e., optimal school and class organization, curriculum, the special education referral process, children who are referred and attitudes toward the project research methodology. We refer to the analysis of the first part as a "context analysis." The second part centered around the educators' viewing and commentary of the videotape in which they were involved. While the first part of the interview was done in typical open ended question-answer format, the second part was unique in its use of the videotape as a document of the behavior of the referred and non-referred children in the classroom lesson videotaped. We were able to obtain the teacher's reports of the lesson events in which the children were engaged as well as their indications of occurrences of referral behavior. We refer to the analysis conducted on this second part of the interview as the analysis of educators' accounts.

Context analysis.

In order to provide a context for the extracted in-depth analyses which focus on the attributional narratives to be outlined below, each interview was summarized according to various topics, i.e., classroom characteristics, student capabilities, referral criteria, referral process, etc. The topics addressed in these context analyses varied depending on whether the source was the teacher, the psychologist, or the E. & P. Committee member. Some of the special topics include:

(1) The Special Education Referral Process. Educators were asked to give their views on the referral system and to describe the process in detail. They were asked to state their criteria for referral and their past and present experiences with the referral system. More specifically they were asked to discuss their knowledge of the referral process, results of prior referrals, expectations of the referral process and anecdotal information on the referral process. This material was summarized for each educator. Comparisons have been made across educators. The above material has been condensed and summarized to provide a context for an in-depth analysis of the attribution process.

(2) Referral Reasons. Of particular interest to our study were the reasons the teacher gave in the interview situation for referring the children. Analysis of this topic allowed us to make comparisons of the reasons given on the official school district referral forms, plus to get an expanded version of the official reasons the teacher referred a child.

(3) Knowledge of the Referral Process. We have been concerned with exploring the teachers' familiarity with the referral process, the steps involved and the ramifications of referring a child.

(4) Teacher's Referral History. The teacher's past interaction with the system should have some bearing on his/her present interaction with the system. Given successful resolutions of referrals in the past a teacher would tend to refer more freely in the present.

(5) Expectations of Referral Process. This concerns what the teacher expects of the system. Is it placement, help in the classroom, etc?

(6) Attitude Toward Referral System. This topic concerns the teacher's overall impression of the referral system, his/her feelings about the efficacy of the process, the consequences for the children and the teachers, and the services of the personnel involved.

(7) Conceptions of Education. Educators were asked to discuss their conceptions of education, classrooms, and students. They were given an opportunity to discuss ways in which they would like to see classrooms organized. They were asked to make comparisons between ideal classrooms and existent classrooms, between ideal students and poor students.

Analysis of Teachers' Accounts.

Prior to actual viewing of the videotape, teachers were given an opportunity to express their feelings about the videotaping of the event and to brief the interviewer on the event to be viewed. Next, the teacher identified the children on the tape for purposes of discussion and transcription of voices. Then, they were given the following instructions for asking the interviewer to stop the tape.

a. When you see something occurring about which you would like to comment.

b. When the child who was referred is doing something about which you would like to comment.

c. When you or the children other than the referred are doing something about which you would like to comment.

d. When you see a comparison between behavior and/or ability of the child referred and other members of the group.

e. When you see some of the behavior on the tape which caused you to refer the child.

f. In general, tell me about the tape.

This second part of the interview, the actual "viewing session," forms the backbone of the analysis of teachers' accounts of students' academic difficulties. This part of the analysis focuses on the educators' descriptions of the referred child and cited referral behavior. It also focuses on behavioral/ability comparisons of the referred child and other lesson participants as discussed and referenced by educators during his/her commentary on the videotape in question.

Once the transcript was summarized and indexed, it served as a basis for the analysis of teachers' theories about success and failure. The transcripts were searched for all statements that educators made about students' school performance. These statements were isolated, extracted from the transcripts, and a line number attached. These statements then became the materials upon which the analysis was conducted.

At first, coding schemes used in previous attribution studies (Frieze, 1976; Cooper and Burger, 1980; Medway, 1979; Bar Tal and Darom, 1979; Bar Tal et al, 1978) were applied to these materials. However, it quickly became clear that the small number and limited scope of coding categories would be

insufficient for these materials. These codes came from studies in which educaters were asked to comment on hypothetical educational situations using categories provided by researchers. We found such codes to be insufficient because the educaters in our study provided descriptions that were much more varied and numerous than previous studies provided for.

By moving back and forth between the materials and an emerging analytic scheme, a more comprehensive set of coding categories was developed. A set of 20 factors was located that encompassed the full range of teachers' accounts about success and failure.

--insert Figure 4.1 here--

Some Features of Teachers' Theories About Failure

An assumption underlying trait theory and prevalent personality theories is that descriptions index underlying traits of people. That is, there is a stable set of invariant conditions beneath trait terms. The warrant for such claims includes the personality research that shows considerable consensus can be achieved by observers assigning personality characteristics to the same acter (Allport, 1961).

This perspective raised the following question for our study: are teachers consistent in the ways in which they account for student success and failure? Or, do they show diversity in their accounts? If teachers show diversity, this may indicate that teachers have particularistic or individualistic theories of referral, which bear little relation to one another. If teachers uniformly account for student success and failure, this may indicate that those in the teaching profession have a common theory of referral.

FIGURE 4.1
CODING CATEGORIES FOR TEACHER ACCOUNTS

Internal Factors
- Ability
- Effort
- Cognitive Focus
- Physical State
- Psychological State
- Trait
- Behavior
- Intrinsic Motivation
- Task Disposition
- Miscellaneous Internal

External Factors
- Extrinsic Motivation
- Others Assistance
- Others Negative Action
- Others Traits
- Lack of External Factors
- Impersonal External
- Task Difficulty
- Miscellaneous External

Internal/External Factors
- Ability-Task
- Miscellaneous Internal/External

Teachers' Reasons for Referral

We addressed this issue in a number of ways which are described below. First, the fifteen teachers descriptions of 31 students referred for special education were analyzed. [23] The accounts they gave for students success and failure were coded using the 20 categories shown in Figure 4.1. Then, the 20 categories were ranked in the order of their frequency of occurrence. The Kendall coefficient of concordance W (Siegel, 1956: 229) was used to determine whether there was agreement between the teachers on the rank order of the frequency of attributions.

This analysis shows that teachers account for student success and failure in similar ways. The factor that one teacher cites as the most important determinant of school success and failure is also the factor that is cited as one of the most important by the other teachers. This is not to say that teachers were in perfect agreement in the rank order of their statements about the causes of success and failure, and a few varied widely in the number, type, and resultant rank ordering of the reasons for success and failure. However, the agreement of teachers' attributions was statistically significant.

--insert Table 4.2 here--

23. These cases were selected from 55 referrals made by 27 teachers. See Menan et al 81979) for the rationale for the selection of this sub-set of teachers for this portion of the study.

TABLE 4. 2

RANK ORDER FREQUENCY OF ATTRIBUTIONS BY CATEGORY

Category	Percentage
Ability	23.6
Behavior	14.7
Psychological State	11.5
Trait	7.8
Cognitive Focus	5.5
Task Disposition	5.3
Physical State	4.2
Effort	3.8
Miscellaneous Internal	3.8
Extrinsic Motivation	3.3
Miscellaneous External	3.1
Others	2.4
Intrinsic Motivation	2.2
Miscellaneous Internal/ External	2.2
Ability/Task	2.0
Impersonal External	1.9
Lack of External	1.6
Others Negative Actions	.7
Others Traits	.6
Task Difficulty	.1

Table 4.1 lists the frequency with which teachers make certain types of statements about the causes of students' classroom difficulties. Students' ability is the most important factor that teachers' consider when judging students' reasons for having difficulties in the classroom, and as a basis for referring students to special education. This concern for ability takes the form of comments about a child, e. g., being "two years behind in reading," or having an "articulation problem," or "the ability level was there." The second most frequently cited reason for students' difficulties was students' behavior. Teachers' cited the following as instances of the behavioral basis of students' classroom difficulties: "He's usually out of his seat," "He will argue with you," "He socked somebody." The third most frequently cited reason for students' difficulties was students' psychological states. Teachers made statements like: "He's always in a bad mood," "He's feeling persecuted," or "he withdraws" as instances of students' psychological states.

It is also important to note that the locus of these reasons for referring students is internal to the students. External factors (e. g., conditions at home, motivational assistance from parents) were cited very infrequently. So, too, more complex causal statements, e. g., some combination of factors to be found at home, and factors found to be within the student, were very seldom cited. Teachers were much more negative in their descriptions of students than they were positive.

The foregoing data concerning teachers' accounts gives some evidence of generality in the views that teachers have about the cause of students' difficulties in schools.

Teachers' Attributien and Student Placements

We also the influence that teachers' attributions have on students' placements. Here, we considered the possibility that the way in which teachers account for failure will be linked to eventual placement in the special education program. For example, if teachers see the cause of students' academic difficulty to be the result of their inability or effort, will those students be placed differently in the system than students whose teachers see their difficulty to be the result of facters external to the students (e. g., nome or situatienal facters)?

The impetus for tnis line of thinking came from Carroll and Payne (1977) who analyzed judgments about crime and the criminal by using the internality/externality dimensien of attributien. They found that a persen will be perceived as responsible for a crime to the extent that a criminal act is attributed to the internal qualities of the persen. They also found the correllary to be true: a persen will be perceived as less responsible for a crime to the extent that the criminal act is attributed to situatienal facters. Actual punishments were shown to be distributed along these same dimensions. More severe punishments were meted out when criminals were seen as responsible for the crimes, and less severe punishments followed crimes when the criminal was considered less responsible.

Although placement in a special education program can not be equated to "punisnment," we wanted to see whether parallels can be drawn to the importance of the internality-externality attribution. If school personnel attribute preblems to internal facters of the child, will the prediction about placement and the actual placement be more "severe" than if the attribution is

made to external factors? That is, will external attributions be linked to in-class treatments or pullout programs, while internal attributions be linked to all-day self-contained special education treatments?

We did not find support for a relationship between teachers' attributions and final students' placements. Since there were gender differences in referrals, only boys were used in this assessment. In terms of the severity of placement (where severity was defined in terms of the amount of remedial help): the least severe was "no assessment recommended," the next was "tested and returned to the classroom," the next was "returned with remedial help," and the most severe was "LDG."

We did not find any differences in the way that teachers talked about students' difficulties, regardless of whether students were placed in all-day educational programs, part-time pullout programs, or whether they stayed in classrooms with some sort of remedial help. Regardless of eventual student placement outcome, teachers talked about students' ability, behavior and psychological states as among the most important reasons for students' difficulties. Indeed, the seven most frequently cited reasons for students' academic difficulties were closely aligned.

--insert Table 4.3 here--

This means that students who are institutionally defined as LD or EH are not conceptualized differently by teachers than students who are institutionally defined as normal. Teachers talk about students who have been institutionally defined as normal in the same way as students who have been institutionally defined as having learning disabilities.

TABLE 4.3

TEACHERS' REFERRAL REASONS AND SPECIAL EDUCATION PLACEMENT

	LDG	TRR	TR	NAR
1	Behavior	Behavior	Ability	Behavior
2	Ability	Ps. State	Ps. State	Ability
3	Ps. State	Ability	Cog. Foc.	Ps. State
4	Task Disp.	Task Disp.	External	Misc. Int.
5	External	External	Task Disp.	External
6	Trait	Trait	Ph. State	Trait
7	Ph. State	Ph. State	Trait	Int/Ext
8	Int/Ext	Cog. Foc.	Behavior	Ph. State
9	Cog. Foc.	Misc. Int.	Effort	Task Disp.
10	Misc. Int.	Int/Ext	Misc. Int.	Effort
11	Effort	Effort	Int/Ext	Cog. Foc.
12	Int. Mot.	Int. Mot.	Int. Mot.	Int. Mot.

KEY

LDG: Learning disability group

TRR: Tested, returned to classroom with remedial help

TR: Tested, returned to classroom

NAR: No assessment recommended

School Performance and Gender

We also investigated whether teachers account for the school performance of boys and girls differently. A number of experimental studies have shown that sex stereotypes appear to operate in schooling situations in the attribution of success and failure (Feldman-Summers and Keisler 1974; Etaugh and Brown, 1975; Dweck et al, 1975). Typically female success is attributed to motivational factors, effort, luck, and easier tasks, while male success is attributed to ability factors. Female success is thereby disparaged, because when failure is accounted for in terms of low motivation, failure then does not reflect on ability. The implication is that given a similar task, greater motivation would bring success. However when failure is attributed to the difficulty of the task or to "bad luck," control of achievement on the task is out of the hands of the performing person.

These studies are important, because they indicate that educators seem to think about boys and girls differently. However, extensive comparison of these experimental studies and the present study can not be made because they employed prearranged categorical schemes, and presented subjects with hypothetical situations of success and failure, while we evoked far-ranging narratives about actual educational situations.

There were marked differences in the ways teachers in our study talked about reasons for boys and girls' success and failure. Teachers made more attributions about boys than girls. They cast boys in more negative terms, and girls in more positive terms. Teachers talked about the causes of girls' failure in terms of their ability, or rather their inability, i. e., their inability to do math, their inability to read, while the teachers talked about

the causes of boys' failure in terms of their behavior, i. e., unruly classroom conduct. Teachers also cited boys negative psychological states i. e., being in depressed moods, being frustrated, as a main reason for their academic difficulty.

—Insert Table 4.4 here—

The findings concerning ability as the primary cause of girls school failure agree with findings from experimental studies. However, our finding that teachers account for boys' school difficulties in terms of their unruly behavior is not to be found in previous studies. These differences may be due to the methodological differences between experimental and this more naturalistic study. We may be getting more ecologically valid interpretations when teachers are describing their actual students, in actual situations, in their own terms, instead of reacting to hypothetical students in contrived situations in experimenters terms.

Teachers' Accounts and Students' Grade Level

Teachers who taught at different grade levels talked about the reasons for students academic difficulties in similar terms. Kindergarden, first, second, third, and fourth grade students who had been referred were discussed in similar terms by teachers.

Teachers at all four grade levels talked about students in similar ways. The rank ordering of their attributions was very similar.

TABLE 4.4

DISTRIBUTION OF ATTRIBUTIONS FOR BOYS AND GIRLS

Category	Negative		Positive	
	Boys	Girls	Boys	Girls
Ability	16.6	31.7	26.4	38.0
Effort	3.1	1.3	4.5	7.9
Cognitive Focus	6.1	9.6	3.0	3.7
Physical State	5.0	7.1	1.1	3.7
Psychological State	15.1	11.7	7.4	5.0
Trait	5.7	6.7	12.8	7.9
Behavior	20.2	10.4	8.9	7.9
Intrinsic Motivation	.5		4.9	5.8
Miscellaneous Internal	5.3	2.9	2.1	2.1
Task Disposition	6.7	7.5	3.2	1.7
External	11.6	8.8	21.5	10.7
Internal/External	4.1	2.5	4.3	5.8
TOTAL	100.0	100.0	100.0	100.0

Across Context and Within Context Comparisons

Because we followed students' referral cases from the classroom through the decision making system, we were able to make several comparisons. We compared the accounts about students success and failure made by teachers, parents, and psychologists within the final placement meeting. We also compared the teachers' accounts within the decision making meeting to the accounts they made during interview sessions about their classrooms. These comparisons have allowed us to consider differences in educators opinions about the reasons for success and causes of failure across situations and across people. This information has been helpful in determining the relationship between accounts about behavior, surface behavior, and presumed underlying behavioral patterns.

Teachers' Judgments Across Contexts

Teachers refer students for a wide variety of reasons. We want to know whether there are commonalities beneath this diversity. Teachers must provide accounts of their reasons for referring students at a number of points in the referral system: on official referral forms, to school psychologists, and in committee meetings, to name but three. We want to determine if there is variation or commonality in these accounts by the same person across contexts.

Teachers discussed students' academic difficulties in similar ways in the context of the interview and in the context of the committee meeting. Teachers discussed the students' difficulties in terms of internal factors in both settings. Only a small percentage of the reasons given were external to the student. That is, no teacher indicated that a child was referred because the

present home or school environment was the problem. Students' ability, behavior, and psychological states were the most frequently cited reasons in both contexts.

While the causes of students' difficulties were overwhelmingly accounted for in internal terms in both contexts, teachers did introduce or provide expansions of their reasons for referral in interviews. For example, Shane was officially referred for low academic performance, not applying himslef to daily class work, a history of behavioral problems, and truancy in a previous district. The interview provided more information about this case.

The teacher said Shane's home background greatly influenced his classroom performance. She indicated that a recent shift in the structure of the family and a resultant lack of time spent with Shane also had an effect on his performance. Shane appeared to be quiet and cooperative in class, and so the teacher was shocked when he cut school. When the teacher indicated to the parents that she felt Shane needed extra help, the mother indicated that there had been some discussion about this, but she resented it. The teacher thought that much of the delay in getting Shane tested and placed was due to the parents' lack of concern.

The teacher expressed particular concern because of Shane's interest in drawing gruesome pictures and writing gruesome stories. However, the parents indicated to the teacher that he had always been intrigued with war movies and science fiction, and saw it as a stage he would probably outgrow.

The teacher said that she wanted the psychologist to ferret out the causes of this behavior, and to "let her know where to go from here" (11.333.2).

Teachers covered the same types of topics in interviews and placement meetings. In the interview, the teacher indicated that Shane was too dependent upon her:

> I just started really working with him a lot more and trying to just get his head going in another way. And anything positive he would write, one sentence, five words or something, I'd say: 'Gosh, that's really a nice sentence.' Well, he started getting more positive things. It still had to do with war, but it seemed to be more positive. (11.323.16-24)

In the placement meeting, the teacher stated: "Doing independent work is hard for him" (3.7).

In the interview, the teacher indicated that Shane's motivation was influenced by his enjoyment of work:

> At the end of the day he turns his contract in and he'd finished everything. And I said [Shane], I'm just so excited, you know what's happening?
> He said: I just made myself a schedule. I just thought that if I looked at that clock . . . and say at nine thirty I'm going to have my schedule done, then I really work for that, you know, I get as much done as I can.
>
> Then I thought, I got to go on, I got to win (11.351.26-43).

In the placement meeting, the teacher indicated that "he really seems to enjoy handwriting and <u>wants</u> to learn it . . . . He really tries hard at it and seems to want to learn it better" (30.7-34.4).

Although the emphasis on internal factors was fairly constant in the interview and placement meetings, teachers were much more positive in the placement meeting than in the interview. This diffeence could be accounted for by the demands of the placement meeting to shew a discerepancy between potential and performance, or a wish to portray the child in positive terms in front of the parent. This difference could also reflect the reduction of constraints in the interview; teachers consistently said they were more relaxed in interviews. Hence, we might conclude that the personal interviews give a more accurate profile of teachers' perceptions about referral students.

Educaters' Judgments Within Contexts

Although a teacher's judgments about the causes of a student's academic difficulty is important to the final decision reached about that student in tne process of referral, there are other sources of information which are influential. Among them are: (1) the school psychologist's tests and formulated test results, (2) special educators' observations of children in classrooms, and (3) parents' observations about their children out of school. This plethora of information comes together in the final placement meeting, where tne disposition of the case is settled.

Contingent and Non-Contingent Reports.

We will present a detailed examination of one final placement (E&P) meeting to compare the accounts of students' school difficulties provided by different committee members. The meeting we will discuss is the same one discussed in Section 3 of this report. In this meeting, the student, "Shane," was placed in an LDG program. The following discussion is taken from the

"information presentation" phase of that meeting.

The student's mother, his teacher, the school psychologist, and the school nurse all discuss the student and his academic performance, and they all do so differently.

Categorical assessments of student performance. The student is characterized by the psychologist as having "troubles" and "problems." For example, the school psychologist says:

"he has difficulty applying himself to his daily work" (3)

"he cannot switch channels" (5)

"he has some fears and anxieties" (5)

At some points in the meeting, the classroom teacher characterizes the problem in a similar way:

"the problems I see" (6)

"...the fine motor types of things are difficult for him" (8)

"doing independent work is hard for him" (8)

Thus, the issue before the committee is the child and his problem. The child's problems were characterized by both the classroom teacher and the psychologist as being private and internal to the student. They are treated as if they are his private and personal possession. The purpose of the meeting, indeed the entire referral enterprise is to solve the student's problem, and to do so by altering or modifying the internal states of the student.

Situational contingencies of student performance. While the student's problem is the focus of attention for the entire committee, the mother and teacher introduce information about the student which is different than that offered by the psychologist and the nurse. Notable in this regard are

comments about the student's motivation: the teacher says "he enjoys math" (28) in response to the special education teacher's request for information about his math performance. She comments: "he enjoys handwriting and wants to learn it" (30), "he seems to enjoy handwriting and wants to learn it" (30), "he really tries at it hard and seems to wanna learn it better" (34).

She also discusses some of the circumstances surrounding the student's "problems." She introduced a number of contingencies that influenced the student's performance:

1. his performance varies as a function of preparation: "If he studies his spelling and concentrates on it he can do pretty well" (22),

2. his performance varies according to the kinds of materials and tasks: (a) "It's hard for him to copy down [math] problems...if he's given a sheet where he can fill in answers and work them out he does much better" (28), (b) he does better on group tasks, "but doing independent type work is hard for him" (8), (c) if the tasks at hand are a means to some other end desired by the student, then his performance improves: "if there's something else he wants to do and knows he needs to do and knows he needs to get through that before he can get on to something else, he'll work a little more dilligently at it" (45).

3. The teacher's remediations are contingent upon the kind of work and the importance of the task. When the nurse asked her how she dealt with the "writing problems," the teacher indicated that her response varied. She either had him redo work if the task was important (30), or if it was a "rush job," then she would only have him clean it up a bit (30).

The classroom teacher provides more details about the circumstances surrounding the problems. When the classroom teacher was asked by the special education teacher about the student's reading level (15), the teacher responded: "about middle third grade" (16), an answer presumably based on the results of a reading test or the reading series used with the student. She then embellished this response with some details about his performance: "He's a good reader, but as far as comprehending it and being able to recall sequences of a story and things like that" (16). She identified two components of the reading task, and provides some sense of the particulars of the reading process upon which her assessment is based.

When the special education teacher asked her about the student's work in spelling (21), she did not only comment on his level of performance; she also provided information about the aspects of the spelling process that cause him difficulty--namely final consonants and silent letters (22).

When the special education teacher asked the teacher about the student's handwriting (31-34), even though presented with a "choice question," she did not respond with either a yes or a no answer. She exceeded the minimal demands of this question by indicating frequency of use, by comparing this student to other students that she knows who "slip back into printing." And, once again, she mentioned his motivation--"he tries to learn" and performs academic tasks.

The classroom teacher also made observations about the manner in which the student performs his work, that is the process, and not just the outcome or product of his work:

> "he's got his multiplication tables down pretty well, but not as quick as I'd like to see him have them" (28)

Here, the speed of processing is discussed along with the student's knowledge of the academic task.

> "...doing independent type work is hard for him...sticking to a task...and getting it done without being distracted" (8-12)

Here, his perserverance and concentration are discussed along with the kind of academic task he has been assigned.

The psychologist had introduced the topic of "peer relations" in her report: "he seems to have good peer relationships" (3). The special education teacher returned to this topic in her questioning of the teacher.

The teacher provided some more detail about his relations with classmates in her answer (14). She provided more particulars later in the meeting, explaining that he's been elected a class officer, and gets along well with girls (87 and 89).

In sum, the teacher, like the psychologist, characterized the issue at hand as "the student's problem." However, the teacher's characterization, unlike that of the psychologist, had a contingent quality.

Historical and biographical contingencies of student performance. If it can be said that the classroom teacher is expanding the range of information available to the committee spatially, by providing situational or local contextual information, then the mother's report adds a temporal dimension by providing historical and biographical contextual information. She continually contrasts her son as he was at an earlier age with how he is now. In each of these contrasts, she emphasizes improvements and changes for the better. Thus

it seems she is working to redeem her child. While she seems to acknowledge the official committee position that there is a problem, she attempts to legitimate her child by emphasizing improvements and by providing an alternative explanation of the source of the problem. For her, the locus of difficulty is not within him, ("it's not physical," "it's not functional"), but it is to be found in his past experience, and the situations he has been in.

Summary. Thus, the reports provided by the psychologist, classroom teacher, mother and nurse can be placed on a continuum from the contingent to the non-contingent. The mother's report is at the contingent end of the continuum because she provides particulars about the biography and history of her son, and references situational circumstances. The classroom teacher's report sits next to the mother's because she tempers her report with statements about local circumstances, but does not provide historical particulars. The nurse's and the psychologist's report are at the non-contingent end of the continuum, because these statements are presented stripped of all contextual features of the situational, and historical variety.

The psychologist made absolute and categorical statements about the student's abilities. She placed the locus of the student's problem within him. The result is a view of a child who has a general, i.e., "context free" disability. In responding to the questions asked by other members of the committee, the classroom teacher tempered her report with contingent factors of a situational sort. She said that the student's performance was influenced by his state of motivation, kinds of classroom tasks, and types of materials. The result is a "context bound" view of a child, one who has specific problems in certain academic situations, but who operates more than adequately in other

situations.

Conclusions

The most general conclusion that emerges from this phase of our study concerns the importance of subjective interpretation as a mediating force in social and educational life. The educators in our study are not perceiving students' behavior directly. Their perceptions are mediated by culturally and experientially provided categories. This general finding is consistent with current research on human information processing, and cognitive studies in sociology and anthropology.

There are more specific conclusions that emerge from this phase of the study as well. These concern: (1) The congruence in teachers' accounts about students' performance; (2) The use of accounts in institutional contexts, and (3) the ecological validity of educators' accounts.

Congruence in Teachers' Accounts

The preceeding analysis of teachers' accounts about students' academic difficulties (1) across many teachers, (2) across many primary school grade levels, (3) many special education placement outcomes, can be interpreted as giving evidence for a general theory of referral for teachers.

The teachers in our study seem to have categories or conceptions in terms of which they view their students' behavior. These conceptions affect their perceptions of students' success and failure. While individual teachers vary in the way they construct specific dimensions of disability, this variation fades away when the structure of their accounts about disability is con-

sidered. Despite the wide variation in the circumstances in classroom configurations, individual students' biographies, teaching styles, grade level, and the rest, the categories that teachers use to account for students' success and failure are very consistent.

One of the most consistent features of these educators' accounts concerns the locus of the student's problem which becomes the basis of referral. The child's problems are characterized by classroom teachers, psychologists, and nurses as being internal to the student. They are treated as if they are his personal and private possession. This is a prime example of the use of dispositional properties in the search for the explanation of other people's behaviors (D'Andrade, 1974; Shweder, 1977; Cantor and Mischel, 1979). This "personological" or individualized defect (Lopes, 1979) metaphor places the source of the problem "squarely on the back, or rather in the head of the child" (Coles, 1978:333). [24] Personological accounts offer categorical assessments of student performance, and result in a context-free view of student disability.

Teachers conceptions of students' success and failure are mediated by observed behavior. But, they are not a direct reflection of observed behavior. Teachers view students' behavior in terms of these dispositional categories, and relate particular behavior to the production of particular accounts.

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24. See Lakoff and Johnson (1980) for an explication of the structure and power of "metaphors we live by."

Our study has uncovered some of the complex interactional and contextual features involved in the perception, description, and characterization of students. This complexity has convinced us that theories that posit consistency to roles (those of referral and non-referral students) and labels (referral student, EH student, LDG student) need revision. More specifically, these roles and labels need to be understood as products of the interactional work that educators and students engage in to produce them. For example, many personality theories maintain that there is a stable set of invariant conditions beneath trait terms. The warrant for such claims includes the personality research that shows considerable consensus can be achieved by observers assigning personality characteristics to the same actor (Allport, 1961). Our study is similar to recent research (Mischel, 1968; D'Andrade, 1965, 1974; Shweder, 1973, 1975, 1977) in the area that has shown that behavior across situations is not very consistent, while descriptions about such behavior is very consistent across situations.

Accounts in Institutional Contexts

The gap between educators' accounts and observed behavior raises the related issue of the uses of accounts in institutional contexts, more specifically, the consequences of applying labels like "referral student" or "learning disability" for students careers in schools. Garfinkel (1967) showed that the procedures used by a jury to reach decisions were only tangentially related to the accounting procedures used to report the verdict after it had been decided. Cicourel (1968,1978) has shown the ways in which accounts in official records serve as post-hoc justifications of previously taken bureaucratic actions. They are not "springs" or "causes" of behavior prior to the

event.

This work is related to ours in a number of ways. First, the basis of teachers' judgments seems to be more in the structure of semantic categories inherent in the language used to describe students' behavior than it is in the presumed stable patterns of behavior beneath trait terms such as "learning disabled," or "educationally handicapped." Second, students' behavior does not seem to lead to educators' judgments, which then become the basis of an educational decision. Rather, the educational status of the educators' account seems to be a post hoc institutional rationalization of actions taken previously.

The Ecological Validity of Educators' Accounts

The attributions used by educators in our study are different than those reported in experimental studies. For example, Cooper and Burger (1979) report that teachers state that students succeed most often because of their effort, while we found the most salient factor in educators' judgments to be students' ability.

We also found variations across persons in the use of external and internal attributions. The psychologist and the special education teacher placed the locus of the student's problem within the student, while the mother and the teacher brought in more situational factors. These cross-person differences seem to be a function of the knowledge available to each committee member, which in turn, is a function of their place in the institutional order of the school.

We also think that these differences may have a methodological basis. In experimental studies of attributions, subjects are typically asked to evaluate hypothetical situations in terms of categories provided by the experimenter. In our study educators evaluated actual, current, situations in terms of their own categories. As a result, we seem to be getting closer to the categories that educators actually use to make educational judgments.

Our comparisons of educaters' accounts across situations, observers, and time have enabled us to consider the relationship between attributions, surface behaviors, and perceived underlying patterns in considerable detail. By taking into account how particular attributions and descriptions of students' performance are generated within complex educational environments, such as classrooms, testing situations, and decision making meetings, we have been able to consider the consequences that the generation of teachers' accounts has for students' identities and career paths through the special education referral system. We have an advantage over many of the previous investigations of attributions: a record (videotape) of naturally occurring situations that augments the usual [illegible] of attributional accounts about hypothetical situations. The videotape of classroom events enabled us to check out the relationship between teachers' accounts and students' classroom behavior.

By analyzing a behavioral record of naturally occurring situations in conjunctions with accounts about the behavior, we have gone beyond previous work on teachers' judgments to describe some of the interactional activity that contributes to the construction of teachers' accounts, and the relations between behavioral patterns and descriptions of those patterns.

SECTION 5. POLICY IMPLICATIONS

Two primary policy implications emerge from our investigation of the basis of teachers' referrals of students for special education. The first concerns the conception of special students in Federal policy guidelines. The second concerns the implementation of the law itself.

The Conception of Special Students in Federal Guidelines At present, the "medical model" forms the basis of definitions of disability in Federal guidelines. handicapped children are:

> mentally retarded, hard of hearing, deaf, orthopedically impaired, other health impaired, speech impaired, visually handicapped, seriously emotionally disturbed, or children with specific learning disabilities, who by reason thereof require special education and related services [P.L 94.142: Sec.4(a)(1)].

That is, health, vision, hearing, and motor activities are physical states of children that require medication. So, too, are intelligence, aptitude, or mental ability. Furthermore, students are treated as having "a problem"; this disability is perceived as residing within them; it is their private and personal possession. Assessment of the problem is therefore focused on the child; psychological testing is used to find and/or confirm the the presence of a disability within the child. This approach ignores the role of others (e.g., teachers, tester, other students) and the educational and societal context in assessing the nature of the disability.

Our research recommends an alternative approach to special education, one that counters this personological sense of identification and assessment by redefining the problem of disability in interactional terms.

Our research shows that disability is a feature of educational interaction; that is, the institutionalized practices of identifying and assessing students as disabled. We agree with certain versions of labelling theory that disability is not inherent in students' acts. While it is true that students must present or engage in behavior that becomes defined as educationally anomalous, a teacher's scheme of interpretation is necessary for the designation "disability" to be attached to students' behavior. That is to say, "disability" is also grounded in the categories that teachers bring to the interaction, including expectations for academic performance, norms for appropriate classroom conduct, organization of family and community life, and parent-child relations.

When we indicate the importance of teachers' categories for determining educational disabilities, we are not adopting a simplistic version of labelling or expectancy theory. (Rist, 1977). The categories that the teacher brings to the interaction are not independent of students' behavior as some versions of expectancy and labelling theory would lead us to believe. Rather, what teachers bring to the interaction with the students interacts with what the students do with the teacher in the classroom; from this interaction the designation "student disability" is generated.

Thus, from the point of view of this study, disability exists neither in the head of the teacher nor in the behavior of the student. It is, instead, a function of the interaction between educators' categories and students' characteristics.

This constructivist approach to special education concerns the relation that cognitive processes have to social contexts. There have been many demonstrations of the variability in people's displays of competence across contexts (see LCHC, 1981, 1982 for reviews). It seems that "disability" also has this feature of context specificity.

People with "learning disabilities," "educational handicaps," and other forms of what Edgerton (1979) and others call "mild retardation," are first identified in school. However, once such children leave school, many will never be identified as retarded again. Edgerton (1979) reports a 1956 study of over 1000 individuals who had an IQ below 50 as children in Birmingham England: 14% of the women and 26% of the men were employed, and only 14% were living in institutions.

Evidence like this has lead to the use of the term the "six hour retarded child" (Edgerton, 1979:72) referring to the fact that children who can not adequately perform academic tasks in school nevertheless adapt perfectly well to life outside of school. Since children are only retarded in school, it is possible to say that the school itself has, in some sense, caused or created the retardation.

Mercer's (1974) findings about differences in the mentally retarded populations in Catholic and public school makes this point forcefully. Mercer found a significant number of students placed into classrooms for the mentally retarded in Riverside County in the year of her study; there were disproportionately more ethnic, poor, and male students in these classrooms than in the school population at large. By contrast, she found that there were no mentally retarded students in Catholic schools! Resisting the temptation to

reintroduce a Durkheimian interpretation equating solidarity acquired through religious training with mental health, she had group and individualized IQ tests administered to the students in the Catholic schools. She found a similar proportion of students who qualified for special education among the Catholic students. However, these students were not segregated from their peers; they were educated along with other students in regular classrooms. It seems that the students in the Catholic schools were not mentally retarded because the Catholic schools had no "mentally retarded category," and hence, no mechanism for having students classified in this way. Without an institutional machinery to identify, define, and treat students as retarded, the students were educated in routine ways in regular classrooms.

Feldman's (1979) analysis of child prodigees--children at the other end of the intellectual continuum as measured by IQ tests--reinforces the context specific view of reasoning. The prodigees Feldman studied, these children who performed in a given field at an adult level of professionalism before their tenth birthday, were also given a wide range of tests of formal reasoning, including Piaget's five chemicals task, Flavell's role taking test, and map drawing. Feldman found that procicity in one area of development does not seem to generalize to other developmental domains. All prodigees fell within the normal range on these tests, but none were spectacular nor remarkable in comparison with their extraordinary achievements in chess or music.

This context specific view of cognitive processing precludes the notion of disability as a general or static trait (cf. Shweder, 1977; D'Andrade, 1974, 1980;).

Arguing against the medical model which perceives educational handicaps as an attribute of the person, i. e., an individual pathology, Mercer (1975: 99) argues for a "social system" perspective which:

> attempts to see the definition of the individual's behavior as a function of the values of the social system within which he is being evaluated. . . . Deviation is not seen as a characteristic of the individual or as a meaning inherent in his behavior, but as a socially derived label which may be attached to his behavior by some social systems and not others.

Based on this view, we would therefore make two recommendations:

(1) redefine 'disability' eliminate definitions that place disability in the individual to one that recognizes ability and disability exist in the interaction between educators and students;

(2) redefine ability and disability in context specific terms: incorperate definitions and practices of ability and disability that recognize that students' performance will vary from context to context, and that this variation is a natural and normal part of growing up, as much for the 'gifted' as for the 'handicapped' student. A second policy implication that derives from our study concerns the implementation of special education laws.

The Implementation of Special Education Laws

Elmore (1980) distinguishes between two forms of policy implementation: the regulatory view, which exercises control from the top (i .e., the Federal level), and the progrommatic view, which exercises control from the local level. The former involves hierarchical control over policy; the latter involves delegated control over policy.

PL 94-142 is a classic case of hierarchically controlled policy implementation. This is a law written at the Federal level. A series of administrative actions--regulations, guidelines, body counts, budgetary decisions, and the like--have followed the law. These direct actions at the local level. These traditional devices, employed to control policy implementation, e. g., more specific legislation, tighter regulations and procedures, close monitoring of compliance, seem to have had an effect opposite to that intended by the law-makers and policy-writers, at least in the case of special education for so called "learning disabled" and "educationally handicapped" students in the district that we studied.

The school district seems to have spent more time in writing local procedures, conforming to regulations, filling out reports and forms, and monitoring compliance, than it has been concerned with providing actual, practical education for LD and EH students. The success of the Special Education program has become equated with compliance with the letter of the law, i. e., the number of stuents in programs, the amount of time processing students through the system. Submerged in this concern for <u>compliance</u> has been the concern for <u>education</u>. That is, the important issue has become defined as compliance with the law, not delivering an important educational service. The net effect of this law seems to be to increase the number of students in certain categories of special education, but it is not clear whether the students in such programs are benefitting directly from the programs themselves.

While it may seem cavalier to make comments on policy based on a case study, it is our concerted judgment that the Special Educaion effort could benefit greatly by considering Elmore's (1980) recommendation concerning the

programmatic view of policy implementation. In the case of special education for LD and EH students, this would mean providing districts with greater flexibility in determining ways to educate students with special needs. It would also mean removing processing restrictions and quotas. In the extreme, it would mean eliminating those provisions of the law that govern Learning Disabled and Educationally Handicapped Students entirely.

This recommendation will require clarification, especially in light of the current climate in Washington, which seems to include slashing support for educational and other social programs. We are not calling for the elimination of funding for special education; nor are we supporting so-called "block grants." We are calling for an approach to Special Education that provides extra (i. e., governmental) funds for students who have special needs, and makes provisions for flexibility and control at the local level. That is, the rules should still require that the Government provide support for special students, but people at the local agencies need to be given the authority to coordinate and implement programs so that it works best for students at the local level.

Such an approach seems to require some version of what Elmore (1980) has called "backward mapping." This means that the implementation process is thought of as beginning at the local level, and constraints are imposed on those at the top, rather than vice-versa, which is the arrangement under legislation such as PL 94-142. Such a reconceptualization is necessary, because if a policy does not make sense at the local level, it will not be implemented--regardless of the number of rules, regulations, and restrictions written into the law. Furthermore, compliance with a law or federal regulation

does not guarantee that the services implied by the law or regulation will be implemented.

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Section 2.0: Appendix I

PSYCHOLOGICAL AND EDUCATIONAL TESTS ADMINISTERED

CLASSIFICATION OF TEST

I. Personality Inventory

3 Wishes
Draw A Person Test
Draw Your Family Test

II. Visual-Motor/Visual-Perception

Beery Developmental Test of Motor Visual Integration
Bender-Gestalt Test
Developmental Test of Motor Integration
Motor-Free Visual Perception Test
VADS (Visual-Aural Development Scale)
Write-Your-Name

III. Academic

Berkeley
CAT
Indiana Test of Basic Skills
Name As Many Words As You Know
WRAT (Wide Range Achivement Tests)
Subtests: Spelling, Math, and Reading

IV. Intelligence

WISC-R (Wechsler Intelligence Scale for Children-Revised)

Subtests:	Verbal	Performance
	Information	Picture Completion
	Similarities	Picture Arrangement
	Arithmetic	Block Design
	Vocabulary	Object Assembly
	Comprehension	Coding
	Digit Span	Mazes

Appendix II

THE WISC-R: WECHSLER INTELLIGENCE SCALE FOR CHILDREN (REVISED)

The WISC-R has been designed and organized as a test of general intelligence. The WISC-R consists of 12 sub-tests (6 on the Verbal Scale and 6 on the Performance Scale).

VERBAL	PERFORMANCE
1. Information (30 question)	2. Picture Completion (26 items)
3. Similarities (17 questions)	4. Picture Arrangement (12 items)
5. Arithmetic (18 problems)	6. Block Design (11 designs)
7. Vocabulary (32 words)	8. Object Assembly (4 items)
9. Comprehension (17 questions)	10. Coding
11. Digit Span (Optional)	12. Mazes (9 mazes) (Optional)

INFORMATION

1. What it measures:
   a. A background of general information that "the middle class child" gets during growth.
   b. Information is basically cognition (intellectual). (S)he builds larger memory bank.
   c. It is a recall of previously learned and acquired information.
   d. A memory for ideas development and function.
   e. Another factor is verbal comprehension (does (s)he understand the language) Verbal output requires auditory reception, association, verbal expression.
   f. Organization is necessary. Formulation of answer is verbal expression score.
   g. Test reflects education, social, and cultural environment.

2. Examples and Pecularities:
   a. EX: How many ears do you have?
   b. EX: What do we call a baby cow?
   c. EX: Why does oil float on water?
   d. Test allows 5 consecutive misses.

SIMILARITIES

1. What it measures:
   a. Measures logical fault and reason.
   b. Measures abstract and conceptual thinking and associational fluency/verbal fluency, verbal comprehension.
   c. Measures intellectual maturity ability to see relationships and generalize.

2. Examples and Pecularities:
   a. EX: In what way are a wheel and a ball alike? How are they the same?
   b. EX: In what way are an apple and a banana alike?
   c. Ex: In what way are a pound and a yard alike?
   d. Discontinue after 3 failures.

ARITHMETIC

1. What it measures:
   a. Measures power of number reasoning.
   b. Concentration is more necessary.
   c. Numerical fluency. Has time limit.
   d. Has to have general reasoning ability in numbers.

2. Examples and Pecularities:
   a. EX: If I cut an apple in half, how many pieces will I have?
   b. EX: Jim had 8 marbles and he bought 6 more. How many marbles did he have altogether?
   c. EX: Four boys had 72 pennies. They divided them equally among themselves. How many pennies did each boy receive?
   d. Discontinue after 3 consecutive failures.
   e. There is a time limit for each problem.

VOCABULARY

1. What it measures:
   a. Recall of previously learned and used words.
   b. Verbal comprehension/level of formulation and expression.
   c. Maximal culture - more likely to reflect culturally disadvantaged than any other score.

2. Examples and Pecularities:
   a. Directions: "I am going to say some words. Listen carefully and tell me what each word means?
   b. EX: What is a knife?
   c. EX: What is an alphabet?
   d. EX: What does nonsense mean?
   e. EX: What does contagious mean?
   f. Discontinue after 5 consecutive failures.

COMPREHENSION

1. What it measures:
   a. Use of past experiences.
   b. Understanding of social situations.
   c. Has practical common sense questions.
   d. Requires understanding and judgement and stable emotional balance.

2. Examples and Pecularities:
   a. EX: What is the thing to do when you cut your finger?
   b. EX: What is the thing to do if a boy (girl) much smaller than yourself starts to fight with you?
   c. EX: Why should a promise be kept?
   d. Generally long questions.
   e. Hard on audio impaired.
   f. Maximal culture (WASP).
   g. MR/Disadvantaged: score will be low as culture not his/her.
   h. Discontinue after 4 consecutive failures.

DIGIT SPAN (OPTIONAL)

1. What it measures:
   a. A test to indicate reading readiness.
   b. Requires concentration, attention, etc.
   c. Requires ability to screen out distractions similar to learning situation.

2. Examples and Pecularities:
   a. Digits Forward: Directions: "I am going to say some numbers. Listen carefully, and when I am through say them right after me."
   b. Digits Backward: Directions: "Now I am going to say some more numbers, but this time when I stop I want you to say them backwards. For example, if I say 9-2-7, what would you say?"
   c. A child who cannot remember 3 digits forward is usually not ready for reading.
   d. Discontinue after failure on both trials of any item.
   e. Digits should be given at the rate of one per second.

PICTURE COMPLETION

1. What it measures:
   a. Not positive what it measures.
   b. Alertness to environment, perceive detail and to discriminate between essential and non essential detail.
   c. Perceptual foresight, visual cognition, utilizes past experiences to measure perceptual and conceptual abilities.
   d. To comprehend a picture as a whole, test requires no verbalization.

2. Examples and Pecularities:
   a. Directions: "I am going to show you some pictures in which there is a part missing. Look at each picture carefully and tell me what is missing."
   b. EX: Picture-comb; Missing Part-tooth(teeth)
   c. EX: Picture-scissors; Missing Part-screw (bolt)
   d. EX: Picture-cow; Missing Part-cleft (split) in hoof
   e. Discontinue after 4 consecutive failures.
   f. A maximum exposure of 20 seconds is allowed for each picture.

PICTURE ARRANGEMENT

1. What it measures:
   a. Measures social good sense, social alertness, ability to see cause and effect or relationships, evaluative ability and the ability to size up a total situation that is social in nature.
   b. Involves anticipation, visual perception, sequence of events in a logical order and ability to synthesize segments into a meaningful whole.

2. Examples and Pecularities:
   a. Directions: For each item, the child is presented with a series of pictures in a mixed-up order, and is asked to arrange them in an order that tells a story that makes sense.
   b. Allow 45 seconds for items 1-8 and 60 seconds for 9-12.
   c. EX: Place cards in front of the child. "These pictures tell a story about a fight. The pictures are in the wrong order now. See if you can put them in the right order so they tell a story that makes sense."
   d. Discontinue after 3 consecutive failures.

BLOCK DESIGN

1. What it measures:
   a. Involves the ability to perceive and analyze patterns, visual motor coordination, logic reasoning applied to space relationships.
   b. Involves ability to copy and reproduce and see whole part relationship.
   c. No verbalization required.
   d. No. 5-9 blocks could give clue to color blindness. Indicator of reading readiness.

2. Examples and Pecularities:
   a. Materials: 9 blocks colored red on two sides, white on two sides, and red/white on two sides. 11 cards with printed designs.
   b. EX: Design 3 directions: Take four blocks in hand and say, "See these blocks? They are all alike. On some sides they are all red; on some, all white; and on some half red and half white." Turn blocks to show different sides. "They can be put together to make a design like the one you see on the card. Watch me." Construct the design slowly. Then scramble blocks, give them to the child. "Now you make one like the card. Go ahead." Start timing.
   c. If using blocks instead of design cards then tester will assemble designs behind a screen except for Design 1 and 3.
   d. Discontinue after 2 consecutive failures.

OBJECT ASSEMBLY

1. What it measures:
   a. Involves perception and conception from incomplete parts of a familiar configuration.
   b. Familiar configuration ability to analyze and synthesize concrete forms. Spatial relationships, flexibility in working toward an unknown goal.
   c. Visual/motor coordination, spatial orientation, effected by accuracy of speed.

2. Examples and Pecularities:
   a. The entire test is given to all children.
   b. Tester shields pieces when laying them out.
   c. There is a time limit for each item.
   d. EX: Sample Item Directions: APPLE. Arrange the pieces behind the Object Assembly Layout Shield, according to the layout shown below. Then expose the array and say, "If these pieces are put together the right way, they will make an apple. Watch how I do it."

   e. The tester tells child what items 1 and 2 are: girl and horse respectively. No clue is given for items 3 and 4 (car and face).

CODING (A)

1. What it measures:
   a. Perceptual speed, fine eye-hand coordination, accuracy of symbolic facility (how well does child use symbols).
   b. Change of mind set, concentration, attention.
   c. Persistant effort, psycho motor speed, visual/motor coordination and ability to manipulate pencil.

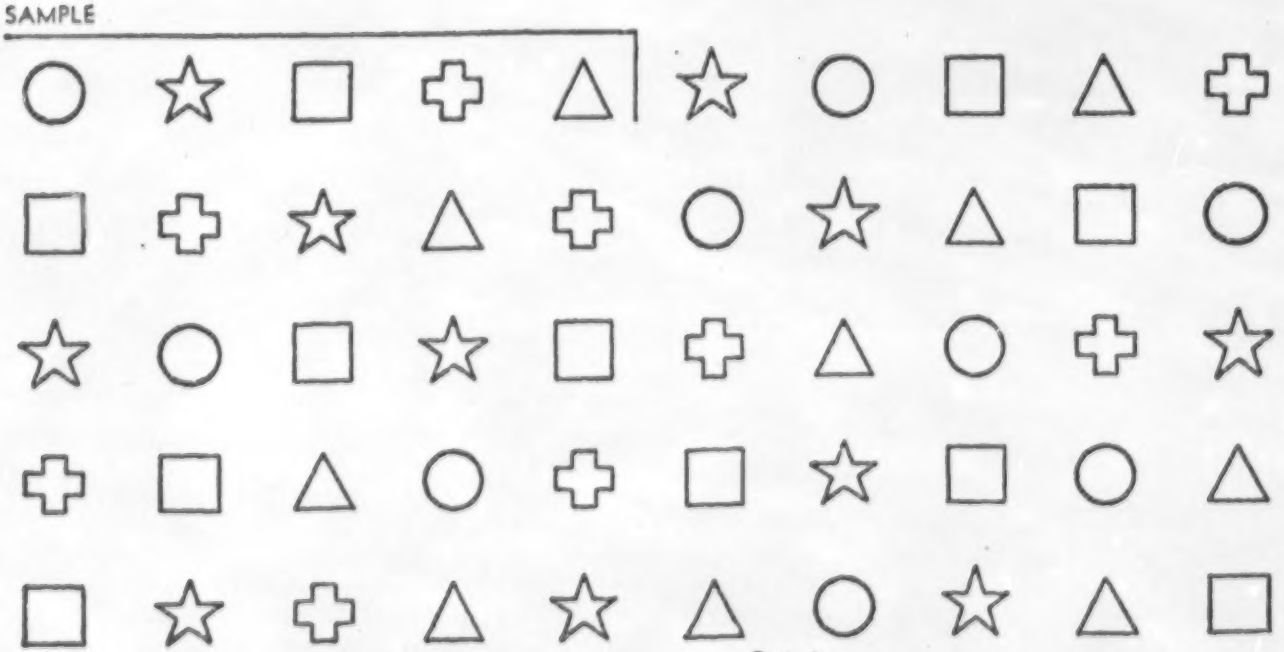
2. Examples and Pecularities:
   a. No verbalization.
   b. This is the first time subject picks up pencil.
   c. If score is low it is fine-eye-hand coordination or memory span.
   d. Gives clue to reading readiness.
   e. EX: Directions: Hand child pencil without an eraser and say, "Look here (point to the Key) and you will see a star, a ball, a triangle, and these other things. See, the star has a line up and down like this (point); the ball has two lines across (point);

the triangle has one line across like this (point); the cross has a little circle in the center, and the box has two straight lines up and down. Now look down here (point) where you see the balls, the stars, the boxes, and other things all mixed up but without any marks in them. I want you to fill in the things here with the same marks they have at the top. This is the way to do it: Here is a ball. Let's look up at the top and find the ball (point). You see it has two lines going this way (point). So you put the two lines in this ball like this (illustrate). The star has one line going up and down, so you put the same mark in here (point). Now you do the other things until you get to this line (point)." When the Sample exercise has been completed, and the child understands what to do, say, "When I tell you to start, you do the rest of them. Begin here (point) and fill in as many things as you can, one after the other, without skipping any. Keep going until I tell you to stop. Work as quickly as you can without making mistakes. When you finish this line (sweep across the first row), go on to this one (point). Go ahead."(Begin timing). At the end of 120 seconds, say, "STOP."

Coding A Example

A

SAMPLE



Coding B Example

B

1	2	3	4	5	6	7	8	9
÷	)	+	⊢	⅂	V	(	·	⊣

SAMPLE

2	1	4	6	3	5	2	1	3	4	2	1	3	1	2	3	1	4	2	6	3	1	2	5	1

3	1	5	4	2	7	4	6	9	2	5	8	4	7	6	1	8	7	5	4	8	6	9	4	3

1	8	2	9	7	6	2	5	4	7	3	6	8	5	9	4	1	6	8	9	3	7	5	1	4

9	1	5	8	7	6	9	7	8	2	4	8	3	5	6	7	1	9	4	3	2	7	9	3

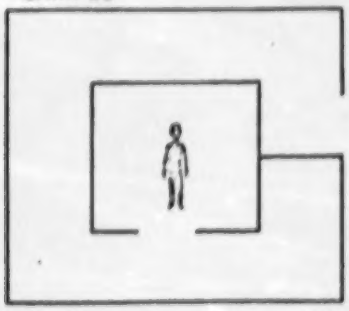
MAZES (OPTIONAL)

1. What it measures:
   a. Visual/perceptual/foresight.
   b. Is child able to look and plan ahead?
   c. Visual/motor coordination (e.g., holding pencil)
   d. Scores are effected by impulsiveness (e.g., might grab pencil and hurry through).

2. Examples and Pecularities:
   a. Discontinue after 2 consecutive failures.
   b. Each maze has a time limit.
   c. The child should not lift pencil from the path and should be reminded of this whenever necessary. There is no penalty for lifting the pencil.
   d. EX: Sample Directions: Place maze booklet in front of the child. Demonstrate the sample maze as follows. Say, "See this boy in the middle here? (Point) He wants to get out to the street, there (point). Let me show you how he could do it without getting stuck. Watch me." Illustrate. After completing the sample maze, point to Maze 1 and say, "Now see if you can get out of this one

yourself. Start here (point) and draw the path you should take to get out without getting stuck. Don't lift your pencil from the paper until you have finished. Go ahead." Start timing. The examples are shown below and on the following two pages.

SAMPLE



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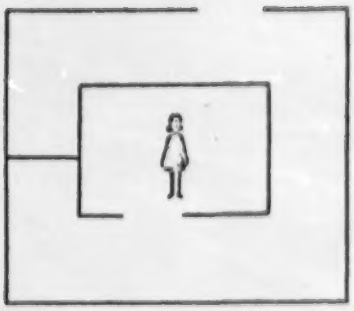

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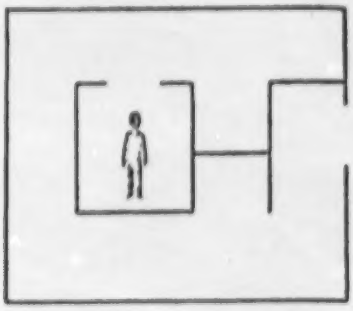

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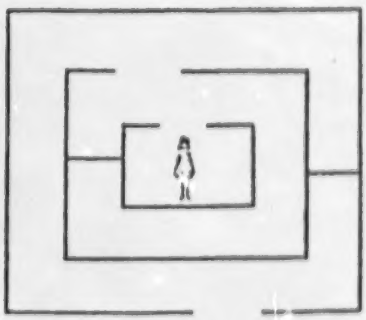

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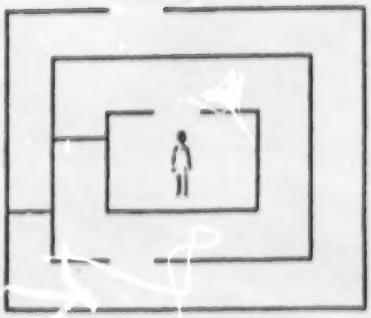

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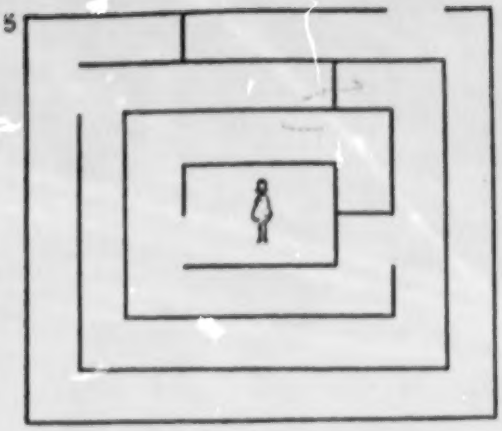

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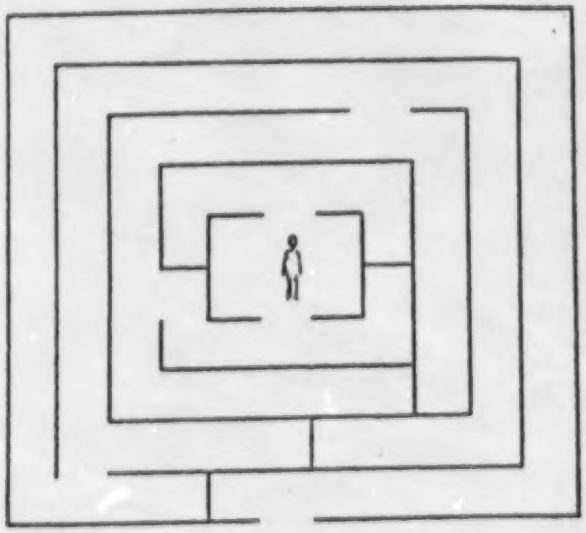

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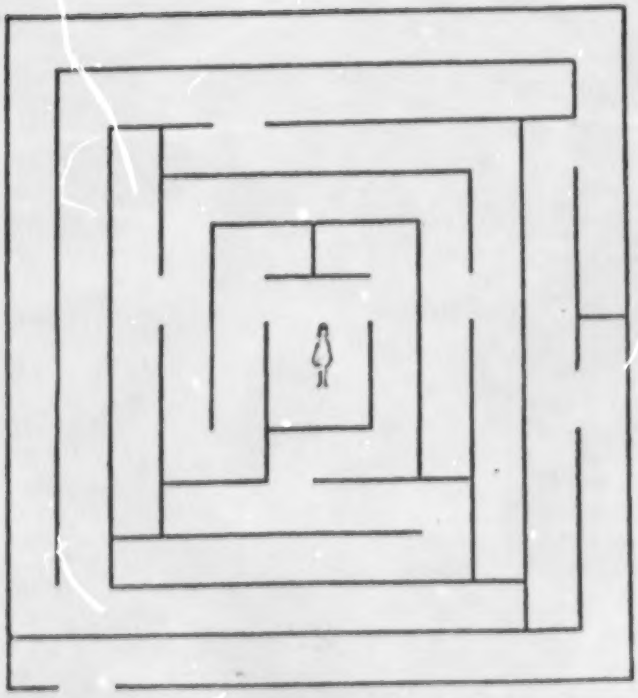

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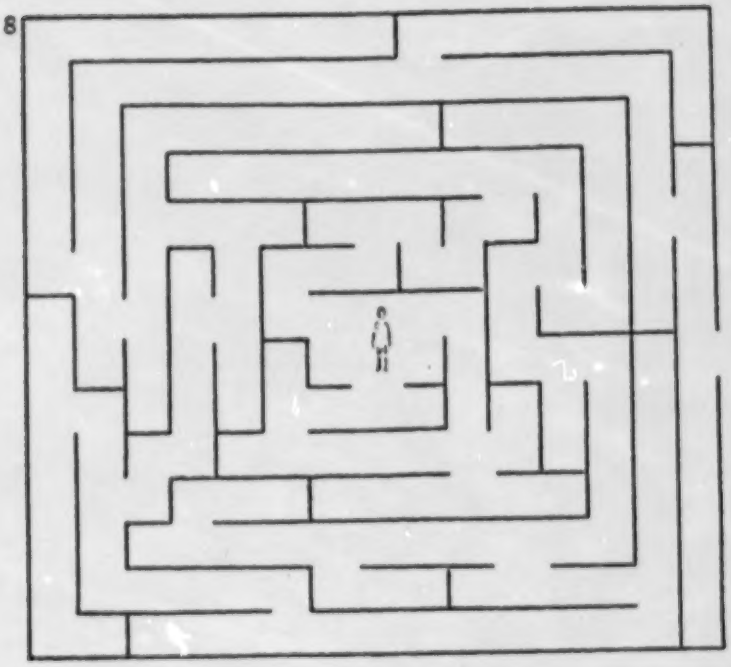

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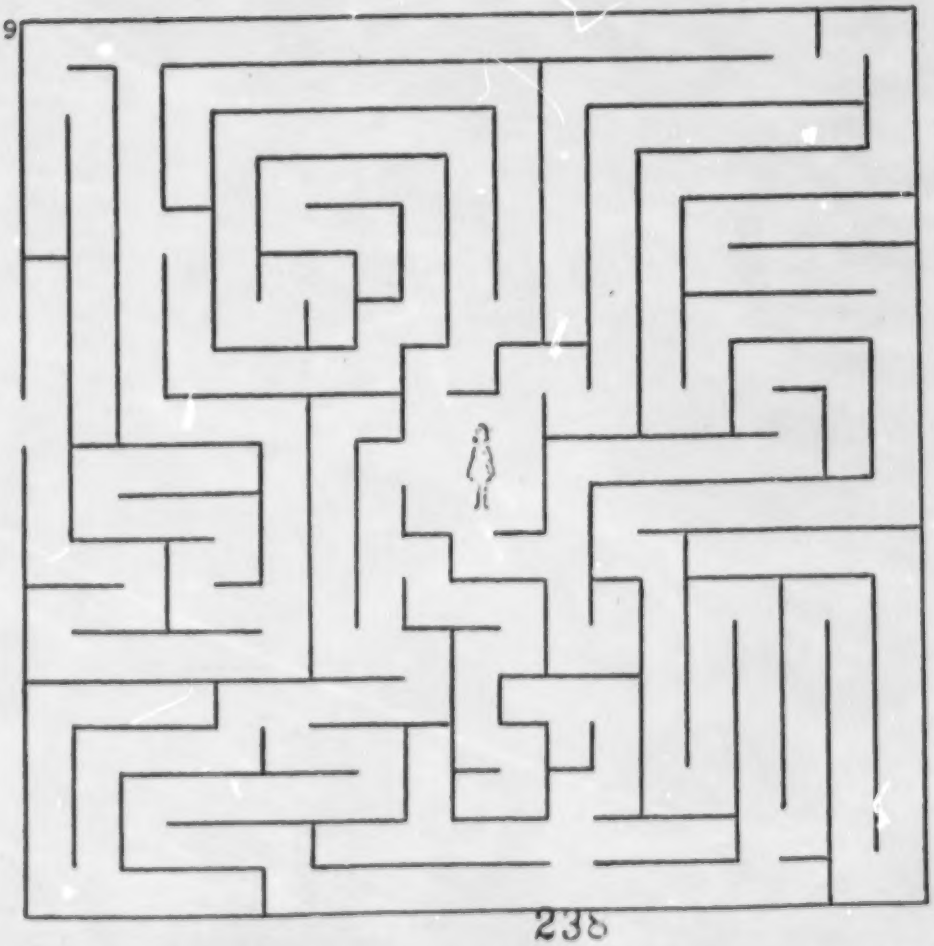

ATTACHMENT I: Transcript Sample

Tester: M.H. Tests Administered WISC-R (Similarities, Vocabulary, Object Assembly, Comprehension
Student Robard Digit Span); Wide Range Achievement Tests (Spelling, Math, Reading)
Date 8-24-79 Running Time 73:25 Videotape Number 55

R.TIME	SEQ.#	SPEAKER	TRANSCRIPT Page 1 of 23	CODE	COMMENTS
			(0:16 not transcribable)		
0:16	1.0	Tester	Okay, I'm going to hold the stopwatch while we work. Otherwise you'll	OP	Opening
	1.1		be timing me//(with) everything I do.		
	2.0	Student	[hehheh yeah. Time us. Let's see how long it takes us to		
	2.1		do something.		
:30	3.0	Tester	Well we'll have some things that are timed. Don't you remember I timed		
	3.1		you the other day/ Robard, there are a couple of things that I'm going		
	3.2		to have to keep all of these things over here because I (want you).		
:45	3.3		Robard, I want us to go back to where we were the other day and I want		
	3.4		to ask you some things. Okay, now we've got to get serious and work.		
1:00	3.5		Cause I want to know what you can do. The other day I was asking you	IN	WISC-R:
	3.6		Robard, how some things are alike. I wanted you to tell me how they		Similarities
	3.7		were the same.		
	4.0	Student	Same or alike.		
	5.0	Tester	Uh huh. And you said you understood that.		
1:15	6.0	Student	Different and they seem different and		
	7.0	Tester	But remember the directions. You're supposed to figure- to tell me how		
	7.1		they're alike. Okay/		
	8.0	Student	Oh yes.		
	9.0	Tester	All right. Now I'm going to say some things again, and I want you to		
1:30	9.1		think real hard before you answer.// And I want you to give me your very		
	9.2		best answer Robard. [		
	10.0	Student	hhh		
	10.1		Uh huh		
	11.0	Tester	It's important.		
	12.0	Student	( )		
	13.0	Tester	Okay.		
	14.0	Student	(Your very best)		
1:45	15.0	Tester	I'm going to be guaging you. I want you to do your very best. (:03)		
	15.1		Tell me how an apple and a banana are alike.	Q	#5
	16.0	Student	That's easy.	A	(0)
	17.0	Tester	Okay.	SAT	
	18.0	Student	They're both fruit.	A	(2)
2:00	19.0	Tester	Good.	E+	
	20.0	Student	YEA::: (:02) Apple and banana are both fruit/ Yeah.		
			(:06) [playing with microphone]	IS*	
2:15	21.0	Tester	Okay. Now is that going to distract you Robard?		
	22.0	Student	Uh uh.		

ATTACHMENT II

READERS' GUIDE TO TRANSCRIPT SYMBOLS+

I. Sequencing

//	A: Okay, what letter is//that? B: [G	The double obliques indicate the point at which a current speaker's talk is overlapped (interrupted) by the talk of another speaker.
[	A: Okay, read this problem right here for me. Tell//me B: [One plus one is two.	A single bracket indicates the point at which the overlap begins, with the overlapping talk placed directly beneath the talk it overlaps.
[[	A: [[No. Put it there. B: [[Oh, she puts it down.	Double brackets placed in front two serially transcribed utterances indicate that they start simultaneously.
*	A: [[No. Put it there. B: [[Oh, she puts it down.* Oh I see.	An asterisk indicates the point at which two overlapping utterances end. In this example, the words "ther" and "down" end simultaneously.
	A: Tell//me* B: [One* plus one is two.	An alternate system, not used in our transcripts consistently, is to place an asterisk at the point in each of the overlapping utterances where the overlap ends. In this example, "me" and "One" are uttered simulataneously.
=	A: All right, are you ready to work?= B: =Did I bring that pencil?	The equal signs indicate latching of talk, i.e., no interval between the end of a prior and start of a next utterance. There are no gaps or overlaps.

+ These transcript symbols are adapted from E. Schegloff (1973).

II. Sound-Production

? / , . !	A: Fifty-eight cents. All right/ B: ((Okay)) A: Was I close at least? B: Pardon/ A: Oh boy, this is gonna be fun!	Punctuation markers are not always used as grammatical symbols. They also indicate intonation. Thus, a Question may be constructed with a '?' or '/'.
::	A: How many hours did he work? B: Thir::ty six hours. Right/ Am I right? A: You're doing a good job. B: Can I just do my ma::::ze?	Colon(s) indicate that the prior syllable is prolonged. Multiple colons indicate a more prolonged or stretched syllable, as in the second instance.
CAPS ____	A: I need you to pay close attention. How old are you, Joel? B: Eight. A: YOU'RE EIGHT YEARS OLD so we're going to start with number three.	Underscoring indicates various forms of stressing, and may involve increased pitch or volume. Capital letters indicate increased volume to the point of "shouting."
-	A: I can't remember//Easter- B: [Who- -Who invented the electric light bulb?	The dash indicates a self-interruption or cut-off of a word.
(( ))	A: ((Okay. That's not quite right.)) (:02) B: Okay, can I pick one?	Materials within double parentheses indicate various forms of decreased or lowered volume, i.e., whispering.

III. Descriptive Devices

( )	A: It's not locked. B: Well (just) shut it. A: (How come it was longer?) B: ((Just a little harder, I guess.)) A: All right. (You know) (Maybe) we worked just a little bit before. A: I think that's ( ).	Single parentheses indicate that transcribers are not sure about the word(s) contained therein. Pairs of parentheses, as in the third instance, offer two possible hearings, and address the equivocality of each. Empty parentheses indicate that no 'hearing' was achieved. The amount of space within the parentheses indicates how long the utterance is that is not transcribable.
⟶	A: Tell me what a hat is. (:02) ⟶ B: You wear it.	An arrow above an utterance indicates a 'speeding-up' of the word(s), i.e., the speaker is talking very fast.

ATTACHMENT II: READERS' GUIDE TO TRANSCRIPT SYMBOLS
PAGE 3

(0:00) A: Let's go to the next one.
B: Nine, two, five. (:05) That was easy.

A: You make your drawings look just like that.
B: (1:13) [working]

[ ] A: Ready/ (:05) [lays out cards]
B: [working] (:10) I think I got it. [continues working] (:14) ((Okay.))

A: (Are you) sure you did them right? Don't don't speed up so miss any of them [coughs].
B: Right/ (Right again) [whistles]

A: Do you need to stand up and take a stretch break?
B: (Might as well.) (:14) [stands and stretches]

Numbers in parentheses indicate elapsed time in seconds. Numbers appearing in front of a colon indicate time in minutes.

Materials within brackets indicate features of the audio-video portion other than actual verbalization, i.e., non-verbal behavior. Other times, they are used to inform the reader of verbalized behavior that is not transcribable. When parentheses occur along side of transcribed comments within brackets, it indicates how much time elapses to complete the activity or event.